

## Sampling indicates that Batesburg-Leesville's water meets or exceeds all drinking water standards!

The U.S. Environmental Protection Agency (EPA) requires water suppliers to provide annual drinking water quality reports to their customers. This requirement was adopted in the 1996 Amendments to the Safe Drinking Water Act. These reports give consumers valuable information to make personal health-based decisions regarding their drinking water consumption. This year's report includes results from January through December 2013.

### Source Water Assessment Plan

SCDHEC has conducted an assessment of Batesburg-Leesville's source water. The assessment included a list of all potential contamination sources. Our Source Water Assessment Plan (SWAP) is available for your review at [www.scdhec.gov/environment/water/srcwtrreports.htm](http://www.scdhec.gov/environment/water/srcwtrreports.htm).

If you do not have Internet access, you may contact the Batesburg-Leesville water treatment plant at (803) 532-6410 to make arrangements to view this document.

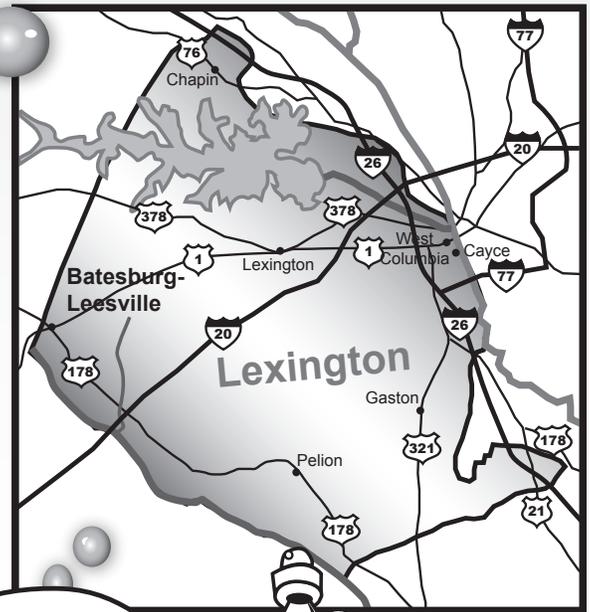
For our customers in the Lake Murray vicinity who receive water that we purchase from Gilbert-Summit Rural Water District, you can also view the Gilbert-Summit SWAP online or arrange to view it by calling our treatment plant.

### Where does my water come from?

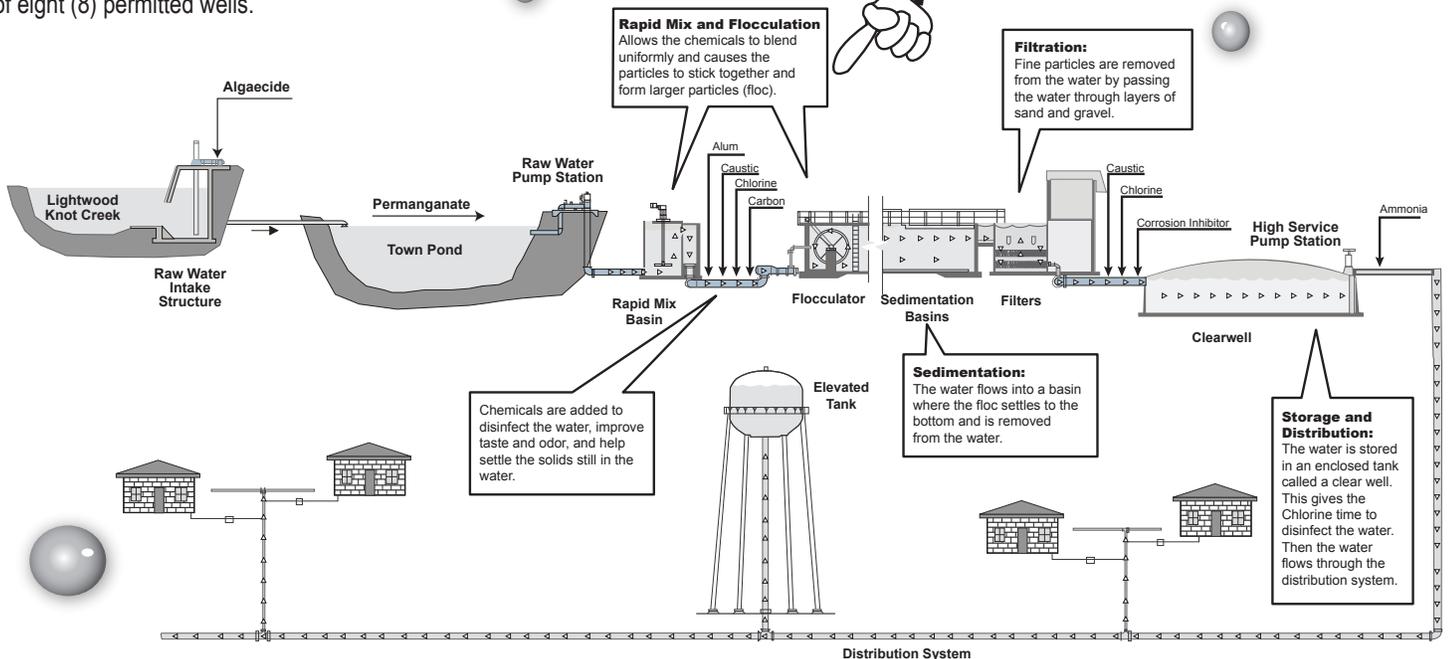
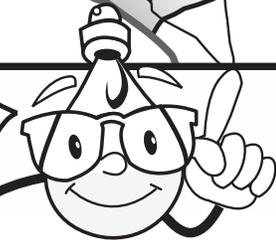
The Batesburg-Leesville Water Treatment Plant was originally built in 1935 when the first two filters were installed at the plant. In 1964, two additional filters were added at the plant to increase the amount of water that could be treated. The latest upgrade at the plant took place in 1992-1993. The sludge in the sedimentation basin was removed, a sludge handling facility was built, and the filters were upgraded from mono-media to dual-media. The treatment plant staffed with about six operators has about 2,950 taps serving approximately 8,000 people.

The Batesburg-Leesville Water Treatment Plant treats water from Lightwood Knot Creek. Water is pumped from Lightwood Knot Creek to the Town Pond and then on to the treatment plant. The treatment plant can treat 2.4 million gallons of water a day.

If you reside in the vicinity of Lake Murray and within Lexington School District 3, you also receive water from the Town of Batesburg-Leesville (B-L Water System #2). However, we do not treat this water at our surface water treatment plant. Instead, we purchase this water from the Gilbert-Summit Rural Water District. Gilbert-Summit's water source consists of eight (8) permitted wells.



This diagram describes how our surface water is treated!



## About this report...

Each day, our employees work to ensure that the water delivered to your home meets all regulatory requirements and your expectations for safety, reliability and quality. For your protection, the staff at the Batesburg-Leesville Water Treatment Plant, as well as DHEC, test your drinking water for many parameters. Although several other contaminants were tested for, the following tables show only the parameters that were detected in your water during calendar year 2013 or during the most recent sampling event.

## Microorganisms/Indicators

Parameter	Treatment Requirement	Levels Detected	Violation?	Potential Sources
Turbidity	95% of combined filter effluent samples less than 0.3 ntu and no single sample >1.0 ntu	100% less than 0.3 ntu; highest single sample of <b>0.25 ntu</b>	No	Soil Runoff
Total Coliform	≤ 1 sample that is positive	0 positive samples	No	Naturally present in environment

## Inorganic Chemicals

Parameter	MCL	MCLG	Highest Level Detected	Violation?	Year Sampled	Potential Sources
Fluoride	2 ppm*	2 ppm*	<b>0.72 ppm<sup>1</sup></b> <b>0.94 ppm<sup>2</sup></b>	No	2013 <sup>1</sup> 2011 <sup>2</sup>	Erosion; discharge from fertilizer; drinking water additive
Nitrate	10 ppm	10 ppm	<b>0.38 ppm<sup>1</sup></b> <b>4.3 ppm<sup>2</sup></b>	No	2013 <sup>1</sup> 2013 <sup>2</sup>	Erosion; runoff from fertilizer
Barium	2 ppm	2 ppm	<b>0.063 ppm<sup>2</sup></b>	No	2011 <sup>2</sup>	Discharge of drilling wastes; discharge from metal refineries; erosion from natural deposits

\* EPA's MCL and MCLG for fluoride are 4 ppm, however, SCDHEC has set a lower level to ensure human health.

## Organics Removal

Parameter	MCL	Required % TOC Removal	Detected Average % TOC Removal	Range of % TOC Removal	Sample Frequency	Violation?	Potential Sources
Total Organic Carbon	TT	50%	61.9%	53.4% - 68.0%	Monthly	No	Decaying organic materials in environment

## Radioactive Parameters

Source ID (Well)	Parameter	MCL*	Level Detected (Average)	Violation?	Potential Sources
B32003* & B32004* <sup>2</sup>	Alpha Emitters	15 pCi/L	<b>6.89 pCi/L<sup>2</sup></b> <b>Range 0 - 6.89<sup>2</sup></b>	No <sup>2</sup>	Erosion of Natural Deposits
B32003 <sup>2</sup> & B32004 <sup>2</sup>	Combined Radium	5 pCi/L	<b>6 pCi/L<sup>2</sup></b> <b>Range 6 - 7.8<sup>2</sup></b>	Yes <sup>2**</sup>	

\* The MCLG for both Alpha Emitters and Combined Radium is 0 pCi/L. \*\*See Violation Table.

## Disinfectants

Parameter	MRDL	MRDLG	Highest Compliance Value	Range of Monthly Averages	Violation?	Potential Sources
Chlorine/Chloramines	4 ppm (RAA)	4 ppm	<b>1.4 ppm<sup>1</sup></b> <b>1.06 ppm<sup>2</sup> (RAA)</b>	<b>1.0 - 2.1 ppm<sup>1</sup></b> <b>0.82 - 1.30 ppm<sup>2</sup></b>	No	Drinking water additive used to control microbes

## Disinfection Byproducts

Parameter	MCL	MCLG	Highest Compliance Value	Range	Violation?	Potential Sources
Total THM	80 ppb (RAA)	N/A	<b>55 ppb<sup>1</sup> (RAA)</b>	<b>ND - 67 ppb</b>	No	Byproduct of drinking water disinfection
HAA5	60 ppb (RAA)	N/A	<b>16 ppb<sup>1</sup> (RAA)</b>	<b>ND - 58 ppb</b>	No	Byproduct of drinking water disinfection

## Metals

Parameter	MCL	MCLG	90th Percentile Value	Number of Sites Exceeding AL	Violation?	Potential Sources
Copper	AL = 1.3 ppm (based on 90th percentile)	1.3 ppm	<b>0.078 ppm<sup>1*</sup></b> <b>0.026 ppm<sup>2*</sup></b>	<b>0<sup>1</sup></b> <b>0<sup>2</sup></b>	No	Erosion; corrosion of plumbing system
Lead	AL = 15 ppb (based on 90th percentile)	0 ppb	<b>2 ppb<sup>2*</sup></b>	<b>0<sup>2</sup></b>	No	Erosion; corrosion of plumbing system

\* Based on most recent results (2011)

<sup>1</sup> Indicates water from surface water treatment plant. <sup>2</sup> Indicates water purchased from Gilbert-Summit Rural Water District (B-L Water System #2)

## Violation Table

Combined Radium 226/228		
Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.		
Violation Type	Violation Begin	Violation End
MCL, AVERAGE	01/01/2013	12/02/2013
Violation Explanation		
Water samples showed that the amount of this contaminant in Gilbert-Summit Rural Water District ( B-L Water System #2) drinking water at sites B32003 & B32004 were above its standard (called a maximum contaminant level – MCL) for the period indicated.		

### Violations and Exceedances: Radium

The table shows that the Gilbert-Summit Rural Water District continues to deal with a radium issue this year. It received a violation for the annual running average for Combined Radium at two of its wells which exceeded the MCL. Last year, the Town of Batesburg-Leesville notified the residents of System #3210011 regarding exceedance of the MCL for radium in water purchased from Gilbert-Summit Rural Water District for B-L Water System #2. This is not an immediate risk. This is a naturally occurring radioactive material found in soil, water, rocks, plants and foods. This higher level of radium was only measured at two of the eight wells in the Gilbert-Summit Rural Water District. All of the water is mixed or blended; therefore this level of radium is not representative of what is actually supplied to customers. The Gilbert-Summit Rural Water District has tested water at several places in its system and none were in excess of the MCL. However, some people who drink water containing radium 226 and radium 228 in excess of the MCL over many years may have an increased risk of getting cancer. The Gilbert-Summit Rural Water District has worked with SCDHEC investigating all possible options to remedy this situation. Filtration appears to be the best solution, and the District recently installed filter systems on the offending wells. As of December 2, 2013, no water above the MCL was being pumped into the Gilbert-Summet Rural Water District system.

### For People with Special Health Concerns...

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) <http://water.epa.gov/drink/>.

### About Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Batesburg-Leesville is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information is available from the Safe Drinking Water Hotline or at <http://water.epa.gov/drink/info/lead/>.

## Definitively Speaking...

This section contains some explanations of the terminology that we use. We hope this helps to make some sense of your water quality report!

### Inorganic Contaminants

Compounds such as salts, minerals, and metals.

### Trihalomethanes (THM) and Haloacetic Acids (HAA5)

By-products of the disinfection process.

### ppm (parts per million)

One ppm equals one minute in two years or 1 penny in \$10,000.

### mg/L (milligrams per liter)

In water, mg/L means the same as ppm.

### ppb (parts per billion)

One ppb equals one minute in 2,000 years or 1 penny in \$10,000,000.

### pCi/L (picocuries per liter)

Measures the level of radioactivity in water.

### Turbidity

Turbidity is a measure of the cloudiness of the water. It can be an indicator of the possible presence of contaminants. As an example, milk is turbid because you cannot see through it. Tea is not turbid because you can see through it.

### Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

### Maximum Contaminant Level Goal (MCLG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

### MCL Violations

Violations are rare. When there is a violation of a MCL, the elevated level of the contaminant usually occurs for just a day or so. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

### Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

### Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

### Volatile Organic Compounds (VOCs)

Natural and manmade substances used for a variety of industrial purposes. VOCs vaporize and become airborne.

### Nephelometric Turbidity Units (ntu)

Units for measuring turbidity.

### Running Annual Average (RAA)

A moving average based on the four most recent quarterly averages.

### Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water. Remember though, that the addition of a disinfectant is necessary to control microbial contaminants.

### Maximum Residual Disinfectant Level Goal (MRDLG)

The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefit of the use of disinfectants to control microbial contaminants.