

MARCH 16, 2016

Following is the Annual Water Quality Report for 2015. Our goal is to provide to you a safe and dependable supply of drinking water. Our water source is Moss Lake on the Clear Fork of Buffalo Creek. Moss Lake is a surface water source. The water supply for the City of Kings Mountain is sufficient for many years, and is of excellent quality. In our continuing efforts to maintain a safe and dependable water supply it will, from time to time, be necessary to make improvements in your water system. Costs of these improvements may be reflected in future rate structures.

If you have any questions about this report or concerning your water utility, please contact Newt Henson, Jr. at 704-482-7131 from 7:00AM until 3:00PM weekdays. We want our valued customers to be informed. If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the last Tuesday of each month at the Kings Mountain City Hall Council Chambers at 6:00 PM.

Kings Mountain monitors for more than 150 contaminants in our drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2015. The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

**What EPA Wants You to Know**

Some people are more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have had 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**Lead:** 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 City of Kings Mountain 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 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 water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, or at <http://www.epa.gov/safewater/lead>.

All drinking water, including bottled water, may be expected to contain at least small amounts of contaminants. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in

some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Maximum Contaminant Level* The "Maximum Allowed" (MCL) is 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* the "Goal" (MCLG) is 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.

**What does all this mean?**

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

MCL's are set at very stringent levels. To help you understand the possible health effects described for many regulated constituents, a person would have to drink 1/2 gallon 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.

We of the City of Kings Mountain water system work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.



**Microbiological Contaminants Sampled Daily in 2015**

Contaminant (units)	MCL Violation Y/N	Your Water (485 samples)	MCLG	MCL	Lack of Source of Contaminant on
Total Coliform Bacteria (presence or absence)	N	0	0	one monthly positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	0	0	a routine sample and repeat sample are total coliform positive and one is also fecal coliform or E. coli positive	Human and animal fecal waste

**Turbidity - Continuous Monitoring in 2015**

Contaminant (units)	MCL Violation Y/N	Your Water (485 samples)	MCLG	MCL	Lack of Source of Contaminant
Turbidity (NTU)	N	0.109	N/A	TT = 5 NTU TT = percentage of samples < 0.5 NTU	Soil runoff

\*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be below 0.5 NTU.

**Inorganics - Sampled Daily in 2015**

Inorganic Chemical	Sample Date	MCL Violation Y/N	Your Water AVG	Range Low/High	MCL C C C G	MCL C C C L	Lack of Source of Contaminant on
Fluoride (ppm)	2015	N	0.72	0.08 - 1.04	4	4	Erosion of natural deposits, water seepage, water treatment plant construction/upgrade. Will remain as some as possible.

**PEST/SOC Annual Sample 2014**

Contaminant (units)	Sample Date	Your Water	Range mg/l	MCL	Lack of Source of Contaminant
26 Contaminants tested for	8/6/14	N/D	00 - 00	00	
26 Contaminants tested for	11/19/14	N/D	00 - 00	00	
Sampled every 3 years					

**Lead and Copper Contaminants Sampled During September 2013**

Contaminant (units)	Sample Date	Your Water	# of sites found above MCL	MCLG	MCL	Lack of Source of Contaminant
Copper (ppm) (90% percentile)	9/20/13	<0.054	0	1.3	AL-1.3	Corrosion of household plumbing systems; erosion of natural deposits from wood preservatives
Lead (ppb) (90% percentile)	9/20/13	<0.003	0	0	AL-15	Corrosion of household plumbing systems; erosion of natural deposits

Next Lead and Copper Monitoring will be in September 2016

**Disinfection By-Product Precursors Contaminants - Sampled Monthly 2015**

Contaminant (units)	Sample Date	MCL/TT Violation Y/N	Your Water Avg	Range Low/High	MCL C C C G	MCL C C C L	Lack of Source of Contaminant
Total Organic Carbon (ppm) (TOC-S-RAW)	2015	N	2.63	1.72 - 3.10	N/A	N/A	Naturally present in the environment
Total Organic Carbon (ppm) (TOC-S)	2015	N	0.99	N/D	N/A	N/A	Naturally present in the environment

Note: Depending on the TOC in our source water the system MCL/TT have a certain % removal of TOC or must achieve alternative compliance criteria if we do not achieve that % removal there is an alternative % removal. If we fail to meet that, we are in violation of a Treatment Technique.

**Secondary Contaminants, Sampled in 2015**

Contaminant	Sample Date	MCL Violation Y/N	Your Water	Range Low/High	MCL	Lack of Source of Contaminant
Iron	2015	N	.005	.002 - .009	0.30	Naturally present in the environment
Manganese	2015	N	.004	.001 - .013	0.05	Naturally present in the environment

**Other Analysis in 2015**

Sodium	Your Water	MCL - 20mg/l
10.8 mg/l		
Volatile Organic Chemicals (VOCs)	No Detection of 21 VOC Contaminants	MCL varies dependent on contaminant

**Other Analysis From Previous Years**

**Asbestos Contaminant in 2011.**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low/High	MCL C C C G	MCL C C C L	Lack of Source of Contaminant
Total Asbest (AFPL)	11/02/11	N	< 0.20	N/A	7	7	Decay of asbestos cement water main; erosion of natural deposits

Next monitoring period is in 2020

**Radiological Contaminants - Sampled in 2015**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low/High	MCL	Lack of Source of Contaminant
Alpha emitters (pCi/l)	2/18/15	N	N/D	0	15	Erosion of natural deposits
Bidium 228 (pCi/l)	2/18/15	N	N/D	0	2	Decay of natural and man-made deposits
Bidium 226 (pCi/l)	2/18/15	N	N/D	0	3	Erosion of natural deposits
Uranium (pCi/l)	2/18/15	N	N/D	0	20.1	Erosion of natural deposits

Next monitoring period is in 2024

**Disinfection By-Products, Sampled in 2015**

\*Note: Chlorine Continuously Monitored. Disinfection By-Products sampled quarterly.

Contaminant (units)	MCL/ARBL Violation Y/N	Your Water (AVG)	Range Low/High	MCLG	MCL	Lack of Source of Contaminant
THM (ppb) (Total Trihalomethanes)	N	54	28 - 77	N/A	80	By-product of drinking water chlorination
HAAs (ppb) (Total Haloacetic Acids)	N	29	17 - 29	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)*	N	1.24	0.68 - 1.44	MRLG = 4	MRL = 4	Water additive used for control microbes

**Cy photopodium: 2010**

Our system monitored for Cy photopodium under the information Collection Rule (IRC) and found NO DETECTION. A second round of monitoring will begin in Oct 2016.

**Unregulated Contaminants: 2015**

The City of Kings Mountain monitored for 21 unregulated contaminants in 2015. Only 3 contaminants were above the detection limit. Strontium, Chlorate, Hexavalent Chromium. At this time these contaminants are unregulated.

**SOURCE WATER ASSESSMENT PROGRAM (SWAP)**

**RESULTS:** The North Carolina Department of Environment and Natural Resources, Public Water Supply Section conducted assessments for all drinking water sources in North Carolina. The purpose of these assessments are to determine the susceptibility of each drinking water source for potential contaminants sources (PCS's). It is important to understand that the susceptibility rating does not mean poor water quality, only the potential to become contaminated by sources in the assessment area.

**SOURCE NAME: JOHN H MOSS LAKE. Report Date 2/19/10**  
**SUSCEPTIBILITY RATING: MODERATE**

The complete SWAP Report may be viewed at <http://www.doh.nc.gov/pws/swap>. To obtain a printed copy, mail a written request to WATER ASSESSMENT PROGRAM-REPORT REQUEST, 1634 MAIL SERVICE CENTER, RALEIGH, NC 27699-1634 or E-mail request to [swap@ncdoh.gov](mailto:swap@ncdoh.gov). Please include your water system name, PWSID and your name, address and phone number with your request. You may also call 919-707-9098 with any questions.