

RED BOILING SPRINGS

Water Quality Report-2016

Is my drinking water safe?

Yes, our water meets all of EPA's health standards. In the last few years, tests, some annually, have been conducted for over 80 contaminants that may be in drinking water. As you'll see in the chart, we detected 10 contaminants, and found all those contaminants at safe levels.

What is the source of my water?

Your water comes from the McClellan Springs and from the Sabin Spring. Each is ground water under direct influence of surface water. We also purchased some water from the City of Lafayette. Their water comes from Spring Creek Spring, Adams Spring which are groundwater sources under the direct influence of surface water, and the Barren River (surface water). The Tennessee Dept. of Environment has prepared a Source Water Assessment Program Report for the untreated water sources. The Report assesses the susceptibility of untreated water sources to **potential** contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible, or slightly susceptible based on geological factors and human activities in the vicinity of the water source. Our rating is reasonably susceptible. An explanation of the Tennessee Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed at <https://www.tn.gov/environment/article/wr-wq-source-water-assessment> or you may contact the water system to obtain copies of specific assessments.

Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

For more information about your drinking water, please call us at 615 699 2011.

How can I get involved?

For more information about your drinking water, please call us at 615-699-2011. Our City council meets on the 2nd Thursday of each month at 7:00 pm at City Hall. Please feel free to attend these meetings.

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

Other Information

Our water system has a Wellhead protection Program that is approved by the Tennessee Division of Water Supply. We are working with other agencies and local watershed groups to educate the community on ways to keep the water safe. 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.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. 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.

Contaminants that may be present in source water:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Red Boiling Spring's water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Is our water system meeting other rules that govern our operations?

In order to ensure that tap water is safe to drink, the State and EPA requires us to test for contaminants and report on our water on a regular basis. FDA regulations establish limits on contaminants in bottled water. We have always met all of these requirements. We want you to know that we will pay attention to all the rules.

DO I NEED TO TAKE SPECIAL PRECAUTIONS? Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone 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 their personal sanitation, food preparation, handling infants and pets, and 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 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. Red Boiling Springs 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 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>

Water System Security

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 615-699-2011.

Pharmaceuticals In Drinking Water

Flushing unused or expired medicines can be harmful to your drinking water. Learn more about disposing of unused medicines at <https://www.tn.gov/environment/article/sp-unwanted-pharmaceuticals>

Abbreviations for the data and table below: PPB: parts per billion or micrograms per liter ppm: parts per million or milligrams per liter. N/A: not applicable NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water, AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. TT: Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water. BDL means Below Detection Limit. EP: Entry point into the Distribution System. A: McClellan Water Treatment Plant, C: Sabin Water Treatment Plant.



Water Quality Data 2016

What does this chart mean?

- **MCLG** - Maximum Contaminant Level Goal, or 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** - Maximum Contaminant Level, or 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. 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.
- **MRDL**: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- **MRDLG**: Maximum residual disinfectant level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** – explained in relation to time one part per million corresponds to one minute in two years.
- **Parts per billion (ppb) or Micrograms per liter** - explained in relation to time as one part per billion corresponds to one minute in 2,000 years.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
- **RTCR** – Revised Total Coliform Rule. This rule went into effect on April 1, 2016 and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.
- **EP-A** – Identifier for McClelland Springs Water Treatment Plant.
- **EP-B** – Identifier for Sabins Springs Water Treatment Plant.

Contaminant	MCLG in CCR units	MCL in CCR Units	Level found	Range of detections	Violation Y / N	Date of sample	Typical source of Contaminant
Total Coli form Bacteria		<2 Positive samples	0		No	2016	Naturally present in the environment
Total Coliform Bacteria (RTCR)		TT Trigger	0		No	2016	Naturally present in the environment
Turbidity ¹	N/A	TT	.28 EP-A .24 EP-C	.01 – .28 NTU	No	2016	Soil run-off
Copper *	1.3	AL = 1.3 ppm	90 th % = .293 ppm		No	2015	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead *	0	AL=15 ppb	90 th % = 5.97 ppb		No	2015	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate	10 ppm	10 ppm	1.75 EP-A .926 EP-C		No	9/16	Water additive for strong teeth, erosion of natural deposits
Nitrate (Lafayette)	10 ppm	10 ppm	2.37 ppm		No	10/16	Water additive for strong teeth, erosion of natural deposits
Sodium	N/A	N/A	3.42 EP-A 1.28 EP-C		No	2015	Erosion of natural deposits
Sodium (Lafayette)	N/A	N/A	2.02 ppm		No	4/16	Erosion of natural deposits
TTHMs Total Trihalomethanes	0	80 ppb	38.33 ppb	8.11 – 33.10	No	2016	By-product of drinking water disinfection.
HAA HaloAceticAcids	0	60 ppb	13.99 ppb	7.33 – 20.70	No	2016	By-product of drinking water disinfection.
Chlorine	MRDLG = 4	MRDL = 4	1.74 avg	1.60 -2.00	No	2016	Drinking water disinfectant
Chlorine (Lafayette)	MRDLG = 4	MRDL = 4	2.0 avg	1.0 -2.8	No	2016	Drinking water disinfectant
Total Organic Carbons **	TT	TT			No	2016	Naturally present in the environment

¹100% or more of our samples were below the turbidity limit. Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

*2 out of 20 sites sampled had a level exceeding the lead or copper action level.

** The Treatment Technique requirements for Total Organic Carbon were met in 2016.

