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2017 Annual Water Quality Report  
Kentucky American Water – Eastern Rockcastle  
Rockcastle and Jackson County  
PWS ID: KY1020288

Kentucky American Water is proud to be your local water service provider.

Each year, we provide our customers with an Annual Water Quality Report that provides information about where your water comes from, the results of water testing, and information about what was found during that testing during the previous calendar year. We do this because we believe we are delivering more than just water service. We deliver a critical resource for public health, fire protection, economic development and overall quality of life. Our job is to ensure that quality water keeps flowing not only today, but well into the future. This is our commitment to you and the communities we serve.

As a customer of a utility regulated by the Kentucky Public Service Commission, you have the opportunity to participate in periodic public hearings regarding Kentucky American Water. For more information about this process, please refer to the Public Service Commission website at <http://psc.ky.gov> or call 800-772-4636.

The following 2017 annual water quality report contains important information about your drinking water and is available online. Please go to [www.amwater.com/ccr/easternrockcastle.pdf](http://www.amwater.com/ccr/easternrockcastle.pdf) to view your 2017 annual water quality report. To request a paper copy, please call our Customer Service Center at 1-800-678-6301. Although we were not your water supplier in 2017, we want you to be aware of this information that includes data from your previous water provider.

We encourage you to review this report and welcome your comments and questions regarding your water. To provide feedback, obtain additional copies of this report, or to ask questions about your water or questions about this report, please contact our Customer Service Center at 1-800-678-6301.

Kentucky American Water appreciates the opportunity to be your water provider.

**Eastern Rockcastle Water Association**  
**2017 Water Quality Report**

PWSID: KY1020288  
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This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water.

We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system. Eastern Rockcastle Water Association purchases water from three different sources; Jackson County Water Association, which treats surface water drawn from Beulah Lake; City of Mt. Vernon, whose source is surface water drawn from Lake Linville; and Wood Creek Water District, which treats surface water from Wood Creek Lake. The water from Wood Creek is purchased through the City of Livingston. A source water assessment has been completed for all three water supplies which includes an analysis of their susceptibility to contamination. The Mt. Vernon supply indicates that its susceptibility to contamination is generally moderate whereas Jackson County and Wood Creek are rated high. The potential contaminants/land uses of concern include; agricultural activities, logging, erosion, failing septic systems, and highways and railroads.

Under certain circumstances contaminants could be released that would pose challenges to water treatment or even get into your drinking water. These activities, and how they are conducted, are of interest to all customers because they potentially affect your health and the cost of treating your water. The complete source water assessment plans for these water sources can be reviewed at Cumberland Valley Area Development District office in London, Kentucky.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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 (800-426-4791).

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. Your local public water system 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 or at <http://www.epa.gov/safewater/lead>.

**Some or all of these definitions may be found in this report:**

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.

Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - 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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

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, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth.

Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old.

**A= Wood Creek/Livingston B= Jackson County C= Mt. Vernon**

	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT	No more than 1 NTU	A=	0.22	100	No	Soil runoff
* Representative samples of filtered water	Less than 0.3 NTU in 95% monthly samples	B=	0.1	100	No	
		C=	0.51	99	No	

**Regulated Contaminant Test Results**

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
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**Radioactive Contaminants**

**Inorganic Contaminants**

Arsenic [1005] (ppb)	10	N/A	B=	0.2	0.2 to 0.2	Feb-17	No	Natural erosion; runoff from orchards or glass and electronics production wastes
			C=	0.3	0.3 to 0.3	Jan-17	No	
Barium [1010] (ppm)	2	2	A=	0.008	0.008 to 0.008	Aug-17	No	Drilling wastes; metal refineries; erosion of natural deposits
			B=	0.01	0.01 to 0.01	Feb-17	No	
			C=	0.019	0.019 to 0.019	Jan-17	No	
Fluoride [1025] (ppm)	4	4	A=	0.5	0.5 to 0.5	Aug-17	No	Water additive which promotes strong teeth
			B=	0.5	0.5 to 0.5	Feb-17	No	
			C=	0.5	0.5 to 0.5	Jan-17	No	
Nitrate [1040] (ppm)	10	10	A=	0.3	0.3 to 0.3	Feb-17	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
			B=	0.9	0 to 0.9	Feb-17	No	
			C=	0.6	0.6 to 0.6	Jan-17	No	
Thallium [1085] (ppb)	2	0.5	B=	0.5	0.5 to 0.5	Feb-17	No	Leaching from ore-processing sites; discharge from glass, electronics, and drug factories

**Disinfectants/Disinfection Byproducts and Precursors**

Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A=	1.93	1 to 2.96	2017	No	Naturally present in environment.
			B=	1.44	1 to 2.19	2017	No	
			C=	1.7	1.33 to 3.54	2017	No	

\*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.

**Other Contaminants**

Cryptosporidium [oocysts/L]	0	TT	C=	1	12	2017	See note below	Human and animal fecal waste
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Cryptosporidium. We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment at the water treatment plant is sufficient to adequately remove Cryptosporidium from your drinking water.

Cryptosporidium is a microbial pathogen found in surface water. Cryptosporidium was detected in 1 sample of 12 collected from the raw water source for our water system. It was not detected in the finished water. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

**Eastern Rockcastle Water Association**

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
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**Inorganic Contaminants**

Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.93 (90 <sup>th</sup> percentile)	0 to 1.035	June-16	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	6 (90 <sup>th</sup> percentile)	0 to 50	June-16	No	Corrosion of household plumbing systems

**Disinfectants/Disinfection Byproducts**

Chlorine (ppm)	MRDL = 4	MRDLG = 4	.84 (high site average)	0.46 to 1.05	2017	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	32 (high site average)	17 to 38 (range of individual sites)	2017	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	51 (high site average)	18.9 to 40.8 (range of individual sites)	2017	No	Byproduct of drinking water disinfection.

**Maximum Contaminant Levels (MCL's) are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.**

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.