Annual Drinking Water Quality Report 2018 PWS#WV3304139 304-763-4151 June 12, 2019

COOL RIDGE FLAT TOP PSD Consumer Confidence Report – 2019 Covering Calendar Year – 2018

This is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call Jerry Farley at 304-763-4151.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from:

Source Name	Source Water Type	
No other sources to display.		
Buyer Name	Seller Name	1
COOL RIDGE FLAT TOP PSD	BECKLEY WATER COMPANY	1

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

<u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife. <u>Inorganic contaminants</u>, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system is required to test a minimum of 5 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2018 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2018. The state requires 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. Some of the data, though representative of the water quality, is more than one year old. The bottom line is that the water that is provided to you is safe.



Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): 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.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

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.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

Locational Running Annual Average (LRAA): Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

The **Cool Ridge-Flat Top PSD and Beckley Water Company** routinely monitor for contaminants in your drinking water according to federal and state laws. The tables below show the results of our monitoring for contaminants.

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological						
Turbidity	N	0.12 (0.03-0.12) 100% of monthly samples <0.3	NTU	NA	TT	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	N	100	NA	NA	TT= 95% OF SAMPLES MEET THE LIMIT	Soil runoff
Total organic carbon	Ν	1.4 (1.0-2.0)	ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	0.0423	ppm	2	2	Discharge from drilling waste, erosion of natural deposits
Copper*	Ν	0.461	ppm	1.3	AL=1.3	Corrosion of household plumbing
Fluoride	N	0.70 (0.60-0.80)	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lead*	N	1.7	ppb	0	AL=1.5	Lead service lines; Corrosion of household plumbing systems including fittings and fixtures; Erosion of natural deposits
Nitrate	N	0.4	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits
Volatile Organic Contaminants						
Chlorine	N	2.09 Annual avg. Range 0.50-2.22	ppm	4	4	Water additive used to control microbes
Haloacetic acids (HAAC5) Stage 2	N	44.5 Annual avg. Range 13.4-76.2	ppb	0	60	By- product of drinking water disinfection
Total trihalomethanes	N	29.33	ppb	NA	80	By-product of drinking water disinfection

Table of Test Results - Regulated Contaminants – Beckley Water Company – Glade Creek

(TTHMs) Stage 2	Annual avg. Range 9.32-54.3		

*Copper and lead samples were collected from 60 area residences on 7-1/24-17 and 7-1/24-17. Only the 90th percentile is reported. One of the lead samples exceeded the MCL.

One of the lead samples exceeded the MCL. We have provided the offending home with information regarding the health effects and the remediation procedures for excess lead in the plumbing system.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical and mental development. Children could show deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Table of Test Results - Unregulated Contaminants

Contaminant	Sample Year	Amount Detected	MCLG	SMCL	Range	Violation	Typical Source
					Low-High		
Sodium* (ppm)	2018	27			ppm		Erosion of Natural Deposits
Sulfate (ppm)	2018	7.28	NA	250	NA	NA	Runoff/leaching from natural deposits; Industrial wastes

Sodium is an unregulated contaminate. Our sodium level exceeds the guidance level MCL. If you have a concern over sodium, please contact your primary health care provider.

Testing Results for: COOL RIDGE FLAT TOP PSD

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found	d in the Calendar Year of 2018			

No Detected Results were Found in the Colordon View of 2018	Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2018								

Volatile Organic Contaminants	Collection Date	Average Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
Chlorine	2018	1.3	0.4-2.2	ppm	4	4	Water additive to control microbes

Disinfection Byproducts	Monitoring Period	Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2018	46	3.48 - 59.3	ppb	60	0	By-product of drinking water disinfection
ТТНМ	2018	32	13.7 - 47.7	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2015 - 2017	0.249	0.0064 - 0.274	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2015 - 2017	1.7	0.3 - 3.4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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 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.

Total Organic Carbon Lowest Month for Removal	Number of Samples	Actual Removal Ratio	Required Removal Ratio	Lowest Monthly Removal Ratio
No Detected Results were Found in t	he Calendar Year of 201	3		

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Four	nd in the Calendar	Year of 2018					

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Secondary Contaminants-Non Health Based			Range					
Contaminants-No Federal Maximum	Collection Date	Highest Value	(low/high)	Unit	SMCL			
Contaminant Level (MCL) Established.			(low/ligh)					
No Detected Results were Found in the Calendar Year of 2018								

During the 2018 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
10/1/2018 - 12/6/2018	CONSUMER CONFIDENCE RULE	CCR ADEQUACY/AVAILABILITY/CONTENT

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2018 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	1/26/2018	BECKLEY WATER COMPANY	0.124	0.0423 - 0.124 -	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	1/26/2018	BECKLEY WATER COMPANY	0.71	0.71	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	1/26/2018	BECKLEY WATER COMPANY	0.4	0.02 - 0.4	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Secondary Contaminants	Collection	Water	Highest	Range	Unit	SMCL
	Date	System	Value	(low/high)		
ALKALINITY, TOTAL	1/5/2018	BECKLEY WATER COMPANY	21	21	MG/L	10000
CARBON, TOTAL	1/5/2018	BECKLEY WATER COMPANY	3.5	1 - 3.5	ppm	10000
SODIUM	1/26/2018	BECKLEY WATER COMPANY	146	27 - 146	MG/L	1000
SULFATE	1/26/2018	BECKLEY WATER COMPANY	47.6	7.28 - 47.6	MG/L	250
SUVA (SPECFIC						
ULTRAVIOLET	12/6/2018	BECKLEY WATER COMPANY	1.04	0.48 - 1.04	L/MG-M	
ABSORBANCE)						

Please Note: Because of sampling schedules, results may be older than 1 year.

During the 2018 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

	Water System	Туре	Category	Analyte	Compliance Period	I
No Violations Occurred in the Calendar Year of 2018						

This report will not be mailed. A copy will be provided to you upon request at our office during regular business hours and on our website http://crftpsd.org.