

# MATEWAN WATER WORKS

WV3303005

## Consumer Confidence Report – 2023 Covering Calendar Year – 2022

This brochure 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 affects drinking water quality or if you have any questions, comments, or suggestions, please attend any regularly scheduled water board meeting held on the *second Tuesday* of each month at 6:00pm in the *Council Chambers at Town Hall* or call JASON B. ALLEN at 304-426-4227.

Your water comes from :

Source Name	Source Water Type
INTAKE-TUG FORK RIVER	Surface Water

Buyer Name	Seller Name
There are no additional purchases to display.	

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:

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

**Inorganic contaminants**, 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.

**Organic contaminants**, 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 has an estimated population of 2069 and is required to test a minimum of 2 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 2022 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, 2022. 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.

### Terms & Abbreviations

**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.

**Treatment Technique (TT):** 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.

**Testing Results for: MATEWAN WATER WORKS**

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2022				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
2,4-D	4/14/2022	0.1	0.1	ppb	70	70	Runoff from herbicide used on row crops
BARIUM	2/10/2022	0.036	0.036	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CYANIDE	2/10/2022	40	40	ppb	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
FLUORIDE	11/10/2022	0.68	0.45 - 0.68	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	2/10/2022	0.235	0.235	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	3/6/2018	0.39	0.39	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	2/10/2022	1	1	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	RT. 65 N. MATEWAN, RUTHERFORD BS	2022	38	14 - 54	ppb	60	0	By-product of drinking water disinfection
TTHM	4786 MATEWAN CR RD, CISCO RESIDENCE	2022	65	14 - 118	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2018 - 2020	0.0039	0.0014 - 0.012	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2018 - 2020	<2	<2 - <2	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>.

MATEWAN WATER WORKS is working towards identifying service line materials throughout the water distribution supply. The service line inventory is required to be submitted to the state by October 16, 2024. The most up to date inventory is located at 57 Nowlin Street Matewan, WV 25678 if you have any questions about our inventory, please contact JASON B. ALLEN at 304-426-4227.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
2022 - 2022	2.8400	MG/L	2.1	MG/L

Total Organic Carbon Lowest Month for Removal	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	7/13/2022	1.9	0.8 - 1.9	MG/L	0	Naturally present in the environment

	Monitoring Period	MCL	Range (low/high)	Unit	Lowest monthly % <0.3 NTU (TT if < 95%)	Violation	Typical Source
TURBIDITY	2022	TT=1 NTU	0.03 - 0.29	NTU	100%	No	Soil runoff and erosion

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	2/12/2019	0.6	0.6	pCi/L	15	0	Erosion of natural deposits
RADIUM-228	2/12/2019	0.294	0.294	pCi/L	5	0	Erosion of natural deposits

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	11/10/2022	203	62 - 203	MG/L	10000
CARBON, TOTAL	7/13/2022	5.4	0.8 - 5.4	ppm	10000
CRYPTOSPORIDIUM	6/11/2019	1	0 - 1		
GIARDIA LAMBLIA	7/9/2019	1	0 - 1		1
NICKEL	2/10/2022	0.001	0.001	MG/L	0.1
SODIUM	2/10/2022	23.8	23.8	MG/L	1000
SULFATE	3/6/2018	109	109	MG/L	250

The following items were identified as deficiencies during a prior sanitary survey of the water system:

Unresolved Deficiency Date Identified	Facility	Comments
03/21/2022	DISTRIBUTION SYSTEM	System has a grossly unacceptable unaccounted water loss. (WVPSC Regulation 150CSR7-5.6.a) According to the latest WV PSC Annual Report the system is experiencing a 64.14% unaccounted for water rate. Meaning at least 64.14% of all water being produced is not generating a revenue. Please lower the system's excessive unaccounted for water loss with a ultimate goal of being less than 15%. Certain funding sources will not provide grant money or even loans until unaccounted for water is below a certain value. The system needs to make sure all accounted for sources are being accounted for such as flushing water, backwashing water, fire department use, etc. The system needs to make sure meter testing is up to date since older meters read slow and result in un-billed water. The system also needs to be aggressive with leak detection and repair. If help is needed the WV Rural Water Association has equipment and provides leak detection services.
03/21/2022	KING COAL TANK (PS #2 STORAGE TANK)	The storage tank possibly has one leak and maybe two. (64CSR77-9.1.i) At the time of the sanitary survey moisture was found to be present on two suspicious spots along a bolted connection between plates of the tank. So it appears leaks may be in the initial stages of forming in these two locations. Please ensure the storage tank is professional inspected and repaired if needed before a serious leak develops on this critical tank.
05/09/2019	NORTH MATEWAN TANK	The storage tank overflow is not screened. (64CSR77-9.1.f.2) Not having a screen in place allows for potential entry into the tank from insects and also animals such as snakes, birds and bats. Please ensure proper screening is in place for the storage tank overflow. A properly sized screen could be clamped onto the overflow but the best permanent option is to install a flanged connection with a 24-mesh non-corrodible sheet of screen sandwiched between the flanged connection.
05/09/2019	NORTH MATEWAN TANK	The storage tank overflow is not screened. (64CSR77-9.1.f.2) Not having a screen in place allows for potential entry into the tank from insects and also animals such as snakes, birds and bats. Please ensure proper screening is in place for the storage tank overflow. A properly sized screen could be clamped onto the overflow but the best permanent option is to install a flanged connection with a 24-mesh non-corrodible sheet of screen sandwiched between the flanged connection.

During the 2022 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
No Violations Occurred in the Calendar Year of 2022 for Matewan Water		

Additional Required Health Effects Language:

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

There are no additional required health effects violation notices.

There are no additional required health effects notices.

This Consumer Confidence Report is not being mailed to each customer. A copy can be provided upon request by calling our office at 304-426-4227. The CCR is also available at [matewanwv.gov](http://matewanwv.gov)