ARTHURDALE WATER ASSOC. WV3303902 Consumer Confidence Report – 2024 Covering Calendar Year – 2023

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 3rd Wednesday of each month at 6:30 p.m. at 385 M road or call ROBERT RADABAUGH at 304-864-4187.

Your water comes from Ground water:

Source Name	Source Water Type
WELL 1	Ground water
WELL 2	Ground water
WELL 3	Ground water
WELL 4	Ground water
WELL 5	Ground water

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.

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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users. <u>Radioactive contaminants</u>, 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 has an estimated population of 285 and is required to test a minimum of 1 sample(s) 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 2023 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, 2023. 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" 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.

<u>Secondary Maximum Contaminant Level (SMCL)</u>: recommended level for a contaminant that is not regulated and has no MCL. <u>Action Level (AL)</u>: 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.

<u>Minimum Reporting Level (MRL):</u> UCMR 5 Minimum Reporting Levels are the lowest concentrations that laboratories may report to the EPA for UCMR 5 monitoring and are determined using data from multiple laboratories that participate in EPA's UCMR MRL-setting studies. The UCMR 5 MRLs are based on laboratory capability and are not associated with contaminant health effects information. The EPA establishes MRLs to ensure consistency in the quality of the information reported to the agency.

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.

Regulated Collection Date Highest Range Unit MCL MCLG **Typical Source** Contaminants Value (low/high) 0.24 2 2 BARIUM 12/21/2022 0.041 -Discharge of drilling wastes; Discharge ppm 0.24 from metal refineries; Erosion of natural deposits 1.7 CHROMIUM 12/21/2022 1.1 - 1.7 ppb 100 100 Discharge from steel and pulp mills; Erosion of natural deposits DALAPON 11/22/2019 0.46 0.4 - 0.46 200 200 Runoff from herbicide used on rights of ppb way FLUORIDE 1.2 0.17 - 1.2 Erosion of natural deposits; Water additive 12/21/2022 ppm 4 4 which promotes strong teeth; Discharge from fertilizer and aluminum factories NITRATE 12/20/2023 0.02 0 - 0.02 ppm 10 10 Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Testing Results for: ARTHURDALE WATER ASSOC.

Disinfection Byproducts	Sample Point	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	851 CR ROAD	2023	26	26 - 26	ppb	60	0	By-product of drinking water disinfection
TTHM	851 CR ROAD	2023	38	38 - 38	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90TH Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2021 - 2023	0.138	0.015 - 0.205	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2021 - 2023	9	0.34 - 16.2	ppb	15	1	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.

ARTHURDALE WATER ASSOC. 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 **385 M Road**, if you have any questions about our inventory, please contact ROBERT MCVICKER at 304-642-8040.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
5/1/2023 - 5/31/2023	2.80000	MG/L	2.10000	MG/L

Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	8/22/2019	1.41	0.585 - 1.41	pCi/L	15	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
SODIUM	12/21/2022	110	44 - 110	MG/L	1000

Our water system has sampled for a series of unregulated contaminants as part of UCMR 5, all results were less than the method detection limit. Unregulated contaminants are those that do not yet have a drinking water standard set by the US Environmental Protection Agency (EPA). The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available.

During the 2023 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
3/1/2023 - 3/31/2023	CHLORINE	Failed to conduct or report compliance monitoring of a disinfected groundwater source
4/1/2023 - 4/30/2023	E. COLI	Failed to collect routine or replacement coliform samples
4/1/2023 - 4/30/2023	CHLORINE	Failed to collect sample during the assigned monitoring period
4/1/2023 - 4/30/2023	CHLORINE	Failed to monitor/report as required for chlorine or disinfection by- products
12/1/2023 - 12/31/2023	CHLORINE	Failed to maintain microbial treatment

Violation comment: these were routine monthly total coliform samples that were taken late due to lack of access to sample location but were taken at the start of the next month and the sample results showed no total coliform.

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found no coliforms, indicating NO NEED to look for potential problems in water treatment or distribution. However, if total coliforms were found we are required to conduct assessment(s) to identify and correct any problems that were found during these assessments.

Notice: The CCR will not be mailed to you but is available on request by calling 304-413-2288