

The Gladeville Utility District's Water Quality Report for 2022

GLADEVILLE UTILITY DISTRICT • 3826 VESTA ROAD • LEBANON, TN 37090
State Public Water System ID #: TN0000264 Date Distributed: May 2023

The Gladeville Utility District is an equal opportunity provider and employer.

Is my drinking water **SAFE**?

Yes, your drinking water is safe. If a situation arises in which your water is no longer safe to drink, you will be notified within 24 hours. In 2021 we conducted numerous tests for over 80 contaminants that might be found in drinking water and as you can see in the chart on the back, we only detected 11 of these contaminants.

What is the **SOURCE** of my **WATER**?

Your water, which is groundwater, comes from three wells located at our water treatment plant at 3826 Vesta Road. Our goal is to protect our water source from contaminants and we are working with the State to determine the vulnerability of our water source to **potential** contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving water to this water system. The SWAP Report assesses the susceptibility of untreated water source 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 geologic factors and human activities in the vicinity of the water source. The source water for the Gladeville Utility District is rated as reasonably susceptible to potential contamination.

A detailed explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to the EPA may be viewed online at:

<https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html>

Also, you may contact the Water System to obtain copies of specific assessments. A wellhead protection plan is also available for your review by contacting Chief Operator Brian Long at (615) 444 – 2869 between 7:00 A.M. and 3:30 P.M. on weekdays.

Is the water system **SECURE**?

Following the events of September 11, 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 the treatment plant, tanks, fire hydrants, etc. to (615) 449-0301 or (615) 444-2869.

Is the water system meeting other **RULES** that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these testing and reporting requirements. Results of unregulated contaminant analyses are available upon request. We want you to know that we strictly follow all the rules.

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. The Gladeville Utility District 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 at (800) 426-4791 or online at:

<http://www.epa.gov/safewater/lead>.

Other **INFORMATION**

The sources of drinking water (both tap water and bottled water) may 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.

NOTE REGARDING BACKFLOW PREVENTION DEVICES: In accordance with regulations established by the Tennessee Department of Environment and Conservation (TDEC), the Gladeville Utility District requires the installation of a reduced pressure backflow prevention device if an irrigation system, swimming pool, or other such amenity is connected directly to your plumbing system. For more information, please contact our office at (615) 449-0301.

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 at (800) 426-4791.

Contaminants that may be present in source water include:

- 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 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 agriculture, urban storm water 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 storm water 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

What are the possible **HEALTH** impacts of our drinking water?

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 from their health care providers about not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets. 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, which may be reached by calling (800) 426-4791.

How may I get **INVOLVED**?

Our Board of Commissioners normally meets at 11:00 A.M. on the second Tuesday of each month at the District's administrative office, located at 3826 Vesta Road. Please feel free to attend and participate in these meetings.

All governmental powers of the Gladeville Utility District are exercised by the District's Board of Commissioners. The Board consists of three members, serving staggered four-year terms. The Members of the Board are appointed by the County Mayor of Wilson County from a list of three nominees, in order of preference, submitted by the Board. All decisions made by the Board on customer complaints may be reviewed by the Utility Management Review Board, pursuant to Tennessee Code Annotated §7-82-702(7).

For more information about your drinking water, you may contact Chief Water Plant Operator / Operator in Charge Brian Long at (615) 444 - 2869.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

The Gladeville Utility District's Water Quality Report for 2022 Continues on the Following Page

Water Quality Data

About the **DATA**: Unless otherwise noted, the data presented in the following table are from sampling performed during the 2022 calendar year.

CONTAMINANT	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit of Measurement	MCLG	MCL	Likely Source of Contaminant
Turbidity ¹	No	0.60	0.03 - 0.60	2022	NTU	N/A	TT	Soil runoff
Total Organic Carbon ²	No	0.84 avg.	0.50 – 1.17	2022	ppm	TT	TT	Naturally present in the environment
Total Coliform Bacteria (RTCR)	No	0		2022 (Qtrs. 1-4)		0	TT Trigger	Naturally present in the environment

INORGANIC CONTAMINANTS

Chlorine	No	2.4 (low)	2.4 – 3.6	2022	ppm	MRDLG 4	MRDL 4	Disinfectant to control microbes
Fluoride	No	0.68 avg.	0.06 – 1.00	2022	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	No	0.332	N/A	2022	ppm	10.0	10.0	Soil runoff from fertilizer
Sodium	No	4.93		2020	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
Lead ³	No	90 th %= 1.0		09-2022	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper ³	No	90 th %= 0.588		09-2022	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Gross Alpha	No	2.6		2014	pCi/L	N/A	15	Erosion of natural deposits

VOLATILE CONTAMINANTS

Total Trihalomethanes (TTHM)	No	39.25	7.10 – 77.10	2022	ppb	0	80	By-product of drinking water chlorination
Haloacetic acid (HAA5) ⁴	No ⁴	28.70	5.30 – 57.20	2022	ppb	0	60	By-product of drinking water chlorination

What do the ABBREVIATIONS used in the above table mean?

- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **BDL** - Below Detection Limit.
- **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.
- **MRDL**: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial organisms.
- **MRDLG**: Maximum Residual Disinfectant Level Goal, or 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.
- **N/A** - Not Applicable.
- **NTU** - Nephelometric Turbidity Unit, which is a measure of the clarity of water. Turbidity in excess of 5 NTUs is just noticeable to the average person.
- **pCi/L** - Picocuries per liter.
- **Parts per billion (ppb) or Micrograms per liter (Micrograms/L)** - Explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** - Explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.00.
- **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.
- **TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

¹ **Turbidity** is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system. We met the treatment technique for turbidity with 99.95% of our samples being below the permitted turbidity limit of 0.3 NTU in 2022.

² The Gladeville Utility District met the Treatment Technique requirements for **Total Organic Carbon** in 2022.

³ During the most recent round of **LEAD** and **COPPER** testing, 0 out of 60 households sampled contained concentrations exceeding the lead action level and 1 out of 60 of the samples contained concentrations exceeding the copper action level.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

TIER 3 VIOLATION: Monitoring Requirement Not Met by the Gladeville Utility District

The Gladeville Utility District violated a drinking water monitoring requirement on April 8, 2022. Even though this was not an emergency, you as a customer have a right to know what happened and what we are doing to correct this situation.

We are required to monitor your drinking water for specific water quality data, including the continuous monitoring of chlorine, on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During an instance in 2022, we did not continuously monitor for chlorine as required and therefore cannot be sure of the quality of our drinking water during those specific times. The instance occurred for a duration of 45 minutes on April 8, 2022. The chart readings for this incidence showed an adequate chlorine reading before and after the incident, so it can be inferred that the chlorine levels were adequate during these times. Again, however, because continuous monitoring did not occur, we cannot be sure of the chlorine level during these times.

What should you do? There is nothing you need to do at this time. The table below lists the monitoring requirement we did not properly conduct, how often we are supposed to sample, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Monitoring Requirement	Required Monitoring Frequency	Number of valid monitoring samples taken	When all monitoring samples should have been taken	When monitoring samples were resumed
Chlorine level	Continuous (one sample every 15 minutes during plant operation)	All except during the period of 9:00 AM to 9:45 AM on April 8, 2022. (93 out of 96 testing intervals on this date)	Once every 15 minutes during the referenced time frame, indicating approximately 3 missed monitoring points.	Continuous monitoring resumed during the 15-minute time frame after 9:45 AM on April 8, 2022.

What happened? During the incidence as identified above, the pump that handles the testing reagent lost prime and, consequently, the required monitoring did not take place during the time frames stated. **What is being done?** To prevent a recurrence of such an incidence in the future, in the event of an equipment failure or loss of pump prime, a chlorine sample will be immediately pulled and once every 15 minutes until the equipment is functioning properly again.

For more information, please contact Brian Long at 615-444-2869 or 3826 Vesta Road, Lebanon, TN 37090.

Please share this information with everyone who may drink this water, including 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.

This notice is being sent to you by the Gladeville Utility District as part of the District's 2022 Consumer Confidence Report. State Water System ID# 0000264. Date distributed: May 2023.