

# Lone Oak Utility District 2025 Water Quality Report

**Is my drinking water safe?** Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you will see in the chart on the next page, we only detected 10 of these contaminants. We found all of these contaminants at safe levels.

**What is the source of my water?** Your water, which is true ground water, comes from the Chickamauga watershed, a Cambrian-Ordovician carbonate underground aquifer. Our goal is to protect your water from contaminants. We constantly work with the State of Tennessee to determine the vulnerability of our water source to **potential** contamination. Tennessee's Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources 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. Lone Oak Utility District's sources are rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact Tom Bockman at Hixson Utility District at 423.877.3513 between 8am and 4pm Monday through Friday, or TDEC at 1.888.891.8332 to obtain copies of specific assessments.

Your water comes from natural underground sources owned by Hixson Utility District and is withdrawn at two different well fields. The high natural water quality at both Cave Springs and Walker's Corner well fields meet EPA standards to avoid filtration. A Wellhead Protection Plan is available for your review by contacting Tom Bockman at 423.877.3513

**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 (800-426-4791).

The sources of drinking water (both tap 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 can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water:

- 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 stormwater runoff, mining, farming, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and/or 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 stormwater 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**Do I Need To Take Special Precautions?** 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline at 800 . 426 . 4791.

#### How can I get involved?

Our Water Board meets on the third Thursday during the second month of each quarter at 9:30 am at Walden's Ridge Utility District located at 3900 Taft Highway, Signal Mountain, TN. Please feel free to participate in these meetings.

**Is our 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 these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

**Lead in Drinking Water:** If present, lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Lone Oak Utility is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect at one point of time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have it tested, contact Lone Oak Utility at 423.886.2683. Information on lead in drinking water, testing methods, and steps to minimize exposure is available at <https://www.epa.gov/safewater/lead>

**Service Line Inventory:** We have prepared our service line inventory; the current inventory is available online at <https://www.wrud.org/loud-lead-service-line-inventory>. Or you may request a paper copy at 423.886.2683. If you have not completed the service line inventory survey, you can complete it online at <https://www.wrud.org/water-service-line-material-survey>.

**Water System Security:** Following the events of September 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 of our utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 423 . 886 . 2683.

**For more information about your drinking water, please contact Casey Lawson at 423 . 886 . 2683.**

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

# Water Quality Data

## What does this chart mean?

- **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. To understand the possible health effects described for many regulated constituents, 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.
- **MRDL**: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- **MRDLG**: Maximum residual disinfectant level goal. 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.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Below Detection Level (BDL)** - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **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.
- **Parts per billion (ppb) or Micrograms per liter** - 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.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.
- **Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **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.

## Tests Performed By Walden’s Ridge Utility District for Lone Oak Utility District

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)*	No	0	0	2025	0	<5%	Naturally present in the environment
Chlorine	No	1.0 average	0.5 – 1.0 ppm	2025	4 ppm	4 ppm	Water additive used to control microbes
THM – Total Trihalomethanes	No	10.6 ppb		11/11/2025	N/A	80 ppb	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	5.73 ppb		2/10/2025	N/A	60 ppb	By-product of drinking water chlorination
Lead**	No	90th % 1.0 ppb	BDL – 0.0 ppb	2025	AL Goal = 0 ppb	AL = 15 ppb	Corrosion of household plumbing systems, erosion of natural deposits
Copper**	No	90th % 0.414 ppm	0.252 - 0.446 ppm	2025	AL Goal = 1.3 ppm	AL = 1.3 ppm	Corrosion of household plumbing systems: erosion of natural deposits

\*12 samples were taken for the year with no samples testing positive.

\*\*During the most recent round of lead and copper testing, 0 out of 10 households sampled contained concentrations exceeding the action level.

### UCMR 5: Unregulated Contaminants:

Contaminant	Level Found	Range of Detection	Unit	Date of Sample	Likely Source of Contamination
Perfluorobutane Sulfonic Acid (PFBS)(ppb)	0.0043	0.0035-0.0051	µg/L	Jan & July 2024	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

Walden’s Ridge Utility District tested for 29 PFAS Contaminants and lithium at the entry point as part of the EPA’s Unregulated Contaminant Rule (UCMR5) program. PFAS not listed in the table above were below the minimum reporting limit (MRL). For more information on PFAS in drinking water, visit <https://www.epa.gov/pfas>  
**MRL** – Minimum Reporting Level is the lowest analyte concentration that meets Data Quality Objectives that are developed based on the intended use of this method.

### Tests Performed By Hixson Utility District

Contaminant	Violation Yes/No	Level Found	Range of Detection	Date Of Sample	MCLG	MCL	Likely Source of Contamination
Lead	No	90th % = 2.04 ppb	BDL – 6.20 ppb	2023	AL = 15 ppb	AL = 15 ppb	Corrosion of household plumbing systems, erosion of natural deposits
Copper	No	90th % = 0.573 ppm	0.114 – 0.723 ppm	2023	AL = 1.3ppm	AL = 1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	No	0.738 ppm	0.58 – 0.84 ppm	2025	4 ppm	4 ppm	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	No	0.831 ppm	0.522–0.831 ppm	2025	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radium-226 (pCi/L)	No	0.274 pCi/l	BDL–0.247 pCi/l	2023	0	5 pCi/l	Erosion of natural deposits
Sodium (ppm)	No	1.25 ppm	1.19 – 1.25 ppm	2024	N/A	N/A	Erosion of natural deposits; used in water treatment
Barium	No	0.0250 ppm	0.0132 – 0.0250 ppm	2021	2	2	Discharge of drilling waste, discharge from metal refineries. Erosion from natural deposits.
Turbidity (NTU)*	No	0.48 NTU	0.10 – 0.70 NTU	2025	N/A	TT	Soil runoff

#### UCMR 5: Unregulated Contaminants:

Contaminate	Level Found	Range of Detection	Unit	Date of Sample	Likely Source of Contamination
Perfluorobutane Sulfonic Acid (PFBS)(ppb)	0.0066	0.0032-0.010	µg/L	March 2025	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities.

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