

Lone Oak Utility District

2015 Water Quality Report for Lone Oak Residents

Is my drinking water safe? Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over eighty (80) contaminants that may be in drinking water. As you will see in the chart on the next page, we only detected twelve (12) of these contaminants.

What is the source of my water? Our water was treated surface water, purchased from Tennessee American Water from January 1 – April 26, 2015. The source of your water changed to true groundwater purchased from Hixson Utility beginning April 27 – December 31, 2015. Water quality data listed in this report reflects the highest value of each contaminant from both sources during the calendar year of 2015. 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.

To obtain an explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA, contact the Water System or you may view the report online at <https://www.tn.gov/environment/article/wr-wq-source-water-assessment>

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, Monday through Friday between 10 am and 4 pm Eastern Standard Time.

How can I get involved? Our Water Board meets the third Thursday of each month at 1:30 pm at Walden's Ridge Utility District located at 3900 Taft Highway, Signal Mountain, TN. Please feel free to participate in these meetings. The Commissioners of Lone Oak Utility District serve four (4) year terms. Vacancies on the Board of Commissioners are filled by appointment by the County Mayor from a list provided by the remaining Commissioners. Decisions by the Board of Commissioners regarding customer complaints brought before the Board of Commissioners under the District's Customer Complaint Policy may be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of Tennessee Code Annotated.

Is our water system meeting other rules that govern our operations? The State of Tennessee 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 requirements. Results of unregulated contaminant analysis are available upon request at our office.

Other Information: 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.
- 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 also can 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. Our source's water treatment processes are designed to reduce any such substances to levels well below any health concern. 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, Monday through Friday between 10 am and 4 pm Eastern Standard Time.

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. Walden's Ridge 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 thirty (30) seconds to two (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 to take to minimize exposure is available from the Safe Drinking Water Hotline at <http://www.epa.gov/lead/protectyourfamily%23water%23water> or call 800 . 426 . 4791.

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's facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 423 . 886 . 2683.

Pharmaceuticals In Drinking Water

Flushing unused or expired medicines can be harmful to your drinking water. Learn more about disposing of unused medicines online at <https://www.tn.gov/environment/article/sp-unwanted-pharmaceuticals>

For more information about your drinking water, please call our office at 423 . 886 . 2683.

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

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.
- 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.
- BDL – Below detection limits
- ND - Non-Detects - laboratory analysis indicates that the contaminant is not present.
- PPM - Parts per million 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.
- PPB - Parts per billion or Micrograms per liter (µg/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.
- NTU - Nephelometric Turbidity Unit - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

Lone Oak Residents

Tests Performed By Tennessee American Water

| Contaminant | Date of Sample | Violation Yes/No | Level Found | Range of Detections | MCLG | MCL | Likely Source of Contamination |
|------------------------------|----------------|------------------|--------------|---------------------|-------|-------------------|---|
| Total Coliform Bacteria | 2015 | No | 0 | 0 | 0 | 1 positive sample | Naturally present in the environment |
| Chlorine | 2015 | No | .70 average | 0.31 – 2.02 ppm | 4 ppm | 4 ppm | Water additive used to control microbes |
| TTHM – Total Trihalomethanes | 2015 | No | 63.6 average | 8.3 to 51.4 ppb | N/A | 80 ppb | By-product of drinking water chlorination |
| Haloacetic Acids (HAA5) | 2015 | No | 34.8 average | 4.2 to 37.7 ppb | N/A | 60 ppb | By-product of drinking water chlorination |

Tests Performed By Tennessee American Water and Hixson Utility District

| | | | | | | | |
|--------------------------------|------|----|-------------------------|-----------------|-------------------|--------------|--|
| Lead**** | 2013 | No | 90th % 2 ppb | | AL Goal = 0 ppb | AL = 15 ppb | Corrosion of household plumbing systems, erosion of natural deposits |
| Copper**** | 2013 | No | 90th % .107 ppm | | AL Goal = 1.3 ppm | AL = 1.3 ppm | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Fluoride | 2015 | No | 0.88 0.59 average | 0.05 – 0.88 ppm | 4 ppm | 4 ppm | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Alpha Emitters (pCi/L) | 2014 | No | 0.297 | BDL – 0.297 | 0 | 15 | Erosion of natural deposits |
| Beta/photon Emitters (pCi/L) * | 2014 | No | 0.737 | 0.0 – 0.297 | 0 | 50 | Decay of natural and man-made deposits |
| Nitrate (ppm) | 2015 | No | 0.70 | 0.59 – 0.70 | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits |
| Sodium (ppm) | 2015 | No | 5.7 | 5.4 – 6.0 | NA | NA | Erosion of natural deposits; used in water treatment |
| Total Organic Carbon (ppm) ** | 2015 | No | 1.28 | 1.12 – 1.28 | N/A | TT | Naturally present in the environment |
| Turbidity (NTU) *** | 2015 | No | 0.49 | 0.1 – 0.49 | N/A | TT | Soil runoff |

* The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

** The treatment technique for Total Organic Carbon was met 100% for 2015.

*** Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. We met the turbidity requirement in 2015 with 99.95% of samples less than 0.3 NTU.

**** During the most recent round of Lead and Copper testing, 0 of 53 homes exceeded the action level. The results reported are from Tennessee American Water.