

# Lone Oak Utility District Water Quality Report 2008

## Water Quality Statement

We are pleased to report that during the past year, the water delivered to your home or business complied with, or was better than, all state and federal drinking water requirements. For your information, we have compiled a list in the enclosed table, showing what substances were detected in your drinking water during 2008. Although all of the substances listed on the 2008 Water Quality Data table surpasses or meets all federal and state water quality regulations, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

## Source Water Information

Your water is purchased through Walden's Ridge Utility District from Tennessee American Water. Tennessee American Water draws surface water from the Tennessee River. Our goal is to protect our water 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 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. The Tennessee American Water source is 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 at <http://tennessee.gov/environment/dws/dwassess.shtml> or contact TDEC EAS at 1-888-891-8332 (1-888-891-TDEC) to obtain copies of specific assessments or you may contact us at 1-866-736-6420 to obtain a copy of the source water assessment specifically for our company.

## Substances Expected to be in Drinking 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).

To ensure that tap water is of high quality, U.S. Environmental Protection Agency and the Tennessee Department of Environment and Conservation prescribe regulations limiting the amount of certain substances in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Tennessee American Water's advanced water treatment processes are designed to reduce any such substances to levels well below any health concern.

The sources of drinking water (both tap water 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 from human activity.

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 may result from urban stormwater 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 stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may 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.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

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

For more information about your drinking water, please call Susan Holmes, WQ Supervisor, Tennessee American Water at 423-755-7649 or you can visit Tennessee American Water's website at [www.tawc.com](http://www.tawc.com).

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone 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 (800-426-4791).

*Cryptosporidium* is a microbial pathogen found in surface water throughout the US. Although *Cryptosporidium* can be removed through commonly-used filtration methods, US EPA issued a new rule in January 2006 that requires systems with higher *Cryptosporidium* levels in their source water to provide additional treatment. In anticipation of this upcoming rule, Tennessee American Water monitored for *Cryptosporidium* in its raw water with no detections in 2005. Based upon the results of the *Cryptosporidium* monitoring, no additional treatment by Tennessee American Water will be required by the new US EPA regulation.

## 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. Lone Oak 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>

## Community Participation

The Lone Oak Utility District Board meets on the first Thursday of each month at 6:30 PM (EST) at the Lone Oak Community Center. Please feel free to participate in these meetings. The Commissioners of Lone Oak Utility District serve four year terms. Vacancies on the Board of Commissioners are filled by appointment by the Sequatchie County Executive from a list of three nominees certified by the Board of Commissioners to the Sequatchie County Executive to fill a vacancy. The current board members include: John Lyman, Chairman, and Commissioners, Bernard Stewart, and Carl Frazier. Decisions by the Board of Commissioners on 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.

Tennessee American Water provides the customer service support for all customer inquiries regarding your water system. Should you have any questions or concerns about your water service, please call Tennessee American's customer support at 1-866-736-6420, 24 hours a day, 7 days a week.

## Additional Rules that Govern 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 requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

## Other Information

Lone Oak Utility District, in partnership with Tennessee American Water, works around the clock to provide top quality water to every tap. Due to all water containing dissolved contaminants, occasionally your water may exhibit slight discoloration. We strive to maintain the standards to prevent this. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. You can find more information about drinking water, water conservation, source protection and public health from the following sources:

Tennessee American Water	<a href="http://www.tawc.com">http://www.tawc.com</a>
Tennessee Department of Environment and Conservation	<a href="http://www.state.tn.us/environment/dws">http://www.state.tn.us/environment/dws</a>
United States Environmental Protection Agency	<a href="http://www.epa.gov/safewater">http://www.epa.gov/safewater</a>
American Water Works Association	<a href="http://www.awwa.org">http://www.awwa.org</a>
Centers for Disease Control and Prevention	<a href="http://www.cdc.gov">http://www.cdc.gov</a>
Safe Drinking Water Hotline	(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 utility facilities, including treatment plants, tanks, fire hydrants, etc. to 1-866-736-6420.

# LONE OAK UTILITY DISTRICT

## 2008 WATER QUALITY DATA

(PWS ID # TN0008228)

### 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.
- **BDL** - Below Detection Limits- 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.
- **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.
- **TT** - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range	Violation Yes/No	Typical Source
Total Coliform	2008	0	<2 positive samples	0	0	No	Naturally present in the environment
E. coli Coliform	2008	0		0	0	No	Human and animal fecal waste
Turbidity <sup>1</sup> (NTU)	2008	Not Applicable	TT	0.93	0.03 – 0.93	No	Soil runoff
Total Organic Carbon <sup>2</sup> (ppm)	2008	Not Applicable	TT	1.67	1.10 – 1.67	No	Naturally present in the environment
Beta/positron emitters <sup>3</sup> (pCi/L)	2003	0	50	3.2	0.0 – 3.2	No	Decay of natural and man-made deposits
Tritium <sup>4</sup> (pCi/L)	2003	0	20,000	398	0 – 398	No	Decay of natural and man-made deposits
Alpha emitters (pCi/L)	2003	0	15	1.3	0.0 – 1.3	No	Erosion of natural deposits
Combined Radium (pCi/L)	2003	0	5	1.1	0.0 – 1.1	No	Erosion of natural deposits
Chlorine <sup>5</sup> (ppm)	2008	MRDLG=4	MRDL = 4	1.0 (avg) 1.5 (max)	0.5 – 1.5	No	Water additive used to control microbes
Fluoride (ppm)	2008	4	4	1.12 (0.97 avg)	0.72 – 1.12	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	2008	10	10	0.23	0.23	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Sodium (ppm)	2008	N/A	N/A	12	12	N/A	Erosion of natural deposits; used in water treatment

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range	Violation Yes/No	Typical Source	Health Effects Language
TTHM [Total trihalomethanes] (ppb)	2008	N/A	80	72.9 3 <sup>rd</sup> Quarter	52.5– 102.3	No	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years could have problems with their liver, kidney, or central nervous systems and may have an increased risk of getting cancer
Haloacetic Acids [HAA5] (ppb)	2008	N/A	60	39.1 3 <sup>rd</sup> Quarter	21.6 – 64.4	No	By-product of drinking water disinfection.	

Tap water samples were collected for lead and copper analyses from 54 households. Only 1 out of the 54 homes exceeded the action level.

Substance (units)	Year Sampled	Action Level	MCLG	Amount Detected (90th %tile)	Number of Homes above the Action Level	Violation	Typical Source
Copper (ppm)	2007	1.3	1.3	0.19	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)	2007	15	0	2	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup> Turbidity is a measure of the cloudiness of the water. Turbidity is monitored because it is a good indicator or the effectiveness of the filtration system. During 2008, 99% of all samples taken to measure turbidity met water quality standard of less than 0.3 NTU.

<sup>2</sup> The treatment technique for Total Organic Carbon was meet 100% for 2008

<sup>3</sup> The MCL for Beta/positron emitters is written as 4mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

<sup>4</sup> EPA considers 20,000 to be the level of concern for Tritium

<sup>5</sup> Chlorine levels as measured in the distribution system.