Long Neck Water Company

2013 Annual Drinking Water Quality Report

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"¡Hablamos Español!"

The Long Neck Water Company is pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is groundwater. Wells within our system draw their water from the Columbia Aquifer that is part of the Pleistocene Formation sands. The Columbia Aquifer is a coarse sand and gravel, distinctly bedded with segregations of pebbles into bands of gravel (Jordan, 1967). The waters from the wells in use are pumped to treatment facilities. The treatment consists of disinfection, PH and corrosion control.

The Division of Public Health in conjunction with the Department of Natural Resources and Environmental Control (DNREC) has conducted source water assessment of the Long Neck Water Company wells. This program is designed to assess the susceptibility of a public water source to contamination. The assessment of our system has shown that our water system is highly susceptible to various contaminants. **Please call Long Neck Water Company at 302-947-9600** for a copy of this assessment. You may also review this at: http://www.wr.udel.edu/swaphome/swassessments.html

This report shows our water quality and what it means. ***(Este informe contiene información importante acerca de su agua portable. Haga que alguien lo traduzca para usted, o hable con alquien que lo entienda.)***

If you have any questions, concerns, or suggestions about this report or your water company, please contact **Mr. James Mooney, Director of Operations at 302-947-9600 or e-mail us at info@longneckwater.com.** We want our valued customers to be informed about their water company.

Long Neck Water Company monitors for constituents in your drinking water according to Federal and State laws. The table on page 3 shows the results of our monitoring for the period of **January 1st to December 31st, 2013**. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

All 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 the 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 1-800-426-4791.** MCL's are set at very stringent levels. 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.

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 drinking water 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)**

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. In order to ensure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations established limits for contaminants in bottled water, which must provide the same protection for public health. 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 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 byproducts 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 the table on page 3 you will read terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - 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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The Maximum Allowed (MCL) 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.

Maximum Contaminant Level Goal - The Goal(MCLG) is 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.

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.

Maximum Residual Disinfectant Level Goal-(MRDLG) 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 contamination

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2013 Long Neck Water Co. Results of Water Tests

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform MCL	Highest No. of Positive	Fecal Coliform or E.Coli MCL	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive/month	**1** (***July 2013)***		**0**	**N**	Naturally present in the environment.

Lead and Copper

Lead and Copper	**Date Sampled**	**MCLG**	**Action Level (AL)**	**90th Percentile**	**# Sites Over AL**	**Units**	**Violation**	**Likely Source of Contamination**
Copper	07/14/2011	1.3	1.3	0.167	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	07/14/2011	0	15	2	2	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfectants & Disinfection By-Products	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Haloacetic Acids (HAA5)*	08/02/2010	1.068	1.068 – 1.068	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	08/02/2010	1.3	1.3 – 1.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Chlorine Residual, Free	2013	1.1	1 – 1.1	4.0	4.0	ppm	N	Disinfection Practices by Drinking Water Industry
Inorganic & Volatile Organic Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Barium	2013	0.0577	0.0511 – 0.0577	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2013	4.9	2.4 – 4.9	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits
Mercury	2013	1	0.00 – 1.0	2	2	ppb	N	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Methyl tert Butyl Ether (MTBE)	2013	0.86	0.00 – 0.86	10	10	ppb	N	Some people who drink water containing MTBE in excess of the MCL over many years may have an increased risk of developing cancer.
Nickel	2013	2.2	.0.50 – 2.2	100	100	ppb	N	Some people who drink water containing nickel well in excess of the MCL over many years could experience heart and liver damage.
Nitrate [as Nitrogen]	2013	3	2.6 – 2.9	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Unregulated Contaminants

Contaminants	**Collection Date**	**MCL**	**Average**	**Range of Levels Detected**	**Units**
Sodium (Na)	2013		41.0	39.2 – 45.6	ppm

Alkalinity (Alk)	2013		67.2	60.0 - 80.0	ppm
PH	2013	6.5 – 8.5	7.41	7.17 – 7.60	units
Chloride (Cl)	2013	250	17.9	15.2 – 22.5	ppm
Sulfate	2011	250	3.5	2.1 - 4.9	ppm
Manganese	2013	50	13.8	5.8 – 21.7	ppb
Total Dissolved Solids (TDS)	2011	500	119	118 - 120	ppm

Educational Information

Coliform Bacteria: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Out of 143 routine samples collected during the year We had 1positive Coliform Bacteria sample. Bacteria were not found during repeat sampling.

Lead: We routinely sample water at the consumer tap for lead and copper. Because of consistently low detection levels we are on a triennial monitoring program. The next round of sampling is summer of 2014. 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. **Long Neck Water Co**.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 www.epa.gov/safewater/lead.**

Mercury: The Long Neck Water Company continues to monitor primary wells for Mercury on a scheduled basis. The U.S. Environmental Protection Agency sets drinking water standards and has determined that mercury is a health concern at certain levels of exposure. This inorganic mercury is used in electrical equipment and water pumps and gets into the water as a result of improper waste disposal. This chemical has been shown to damage the kidneys of laboratory animals, such as rats, where the animals are exposed to high levels over their lifetime. The EPA has set the drinking water standard for mercury at 2 ppb to protect against the risk for these adverse health effects. **In testing the highest level detected in 2013 was 1 ppb.** Drinking water that meets the EPA standards is associated with little to none of this risk and is considered safe with respect to mercury. Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

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As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is drinkable at these levels. In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. The Long Neck Water Company has taken steps to improve security at our facilities. This included the enclosure of well heads, improved security lighting and increased inspections. We continue to work with local, state and federal agencies to improve security within our system; additionally, we may be contacting customers that live near our facilities to assist in this effort. We ask 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.

We at Long Neck Water Company are committed to providing top quality water to every tap. We strive to provide the best service. Thank you for allowing us to continue our efforts this year.

Please call our office at (302) 947-9600 if you have questions,

or e-mail us at info@longneckwater.com

We're Here To Serve You