2010 Annual Drinking Water Quality Report

Lyme Regis, Inc.

Old Lyme, CT
PWSID #CT1050141

We're pleased to present to you our Annual Drinking Water Quality Report, also known as the Consumer Confidence Report. This report, a requirement of the 1996 amendments to the Safe Drinking Water Act, 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.

Water Source

Our water source consists of one 25-foot, dug, groundwater well, located near the back building on the eastern border of the property. We have no secondary water source. Our daily water production averages around 1,400 gallons, with an estimated yearly withdrawal of 509,000 gallons. The capacity of our pressure tank is 1,800 gallons. We maintain approximately 700 feet of water main and our system serves a population of 21 residents through 16 service connection. Our certified lab is Eastern Analytical Laboratory.

Our water treatment techniques consist of chlorination through injection protect against bacteriological contaminants and pH adjustment with potassium carbonate injection. Over the past year, our system underwent routine maintenance. At this time, we do not have any projects scheduled in the near future. Our regularly scheduled annual meeting is scheduled for October; exact date, place, and time will be published and made available. If you have any questions about this report or concerning your water system, please contact Don Tapper at mailing address 202 Mile Creek Road, Old Lyme, CT 06371 or at telephone number 860-434-5334. We want our valued customers to be informed about their water system.

Source Water Protection

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health sense, good economic sense, and good environmental sense. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water. There are lots of ways that you can get involved in drinking water protection activities to prevent the contamination of the ground water source. Dispose properly of household chemicals, help clean up the watershed that is the source of your community's water, attend public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use. Contact our office for more information on source water protection, or contact the Environmental Protection Agency (EPA) at 1.800.426.4791. You may also find information on EPA's website at http://cfpub.epa.gov/safewater/sourcewater/.

A source water assessment report was recently completed by the Connecticut Department of Public Health, Drinking Water Division. The completed Assessment report is available for access on the Drinking Water Division's web site: http://www.dph.state.ct.us/BRS/Water/Source_Protection/source_protection.htm. The assessment found that this public drinking water source has a **moderate** susceptibility to potential sources of contamination. Additional source water assessment information can be found at the Environmental Protection Agency's website: http://cfpub.epa.gov/safewater/sourcewater/.

Water Quality

Lyme Regis routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows any detection resulting from our monitoring for the period of January 1st to December 31st, 2010. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water include rivers, lakes, ponds and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants, such as salts and metals, 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 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, 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 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, U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The table below lists all of the drinking water contaminants that were detected through out water quality monitoring and testing. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

TEST RESULTS

Unless otherwise noted, testing was done in 2010.

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (2010)	N	**0 absent**	Highest monthly # of positive samples	0 absent	1 positive	Naturally present in the environment
Turbidity (1/11/10)	N	**0.80**	ntu	n/a	TT	Soil runoff
Radioactive Contaminants						
Combined radium (10/6/10)	N	**2.45**	pCi/1	0	5	Erosion of natural deposits
Inorganic Contaminants						
Barium (11/17/09)	N	**0.036**	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper* (2010)	N	**0.255**	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead* (2010)	N	**5.05**	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) (12/7/2010)	N	**6.0**	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (1/11/10)	N	**0.01**	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

* = Reported results are the 90th percentile value (the value that 90% of all samples are less than).

Disinfection By-Products						
Chlorine (2010)	N	**RAA = 0.375** *(0.30-0.40)*	ppm	4	4	Water additive used to control microbes
HAA5 [Total Haloacetic Acids] (2009)	N	**RAA = 6.7** *(single sample)*	ppb	0	60	By-product of drinking water chlorination
TTHM [Total Trihalomethanes] (2009)	N	**RAA = 2.12** *(single sample)*	ppb	0	80	By-product of drinking water chlorination

Unregulated Contaminants *(contaminants with a health advisory)*				
Contaminant	**Level Detected**	**Unit Measurement**	**DWEL**	**Likely Source of Contamination**
Chloride (11/17/09)	**17.0**	ppm	250	Erosion of natural deposits, Storm water runoff containing road salt
Sodium (11/17/09)	**12.0**	ppm	28	Erosion of natural deposits, urban storm runoff
Sulfate (11/17/09)	**10.0**	ppm	250	Erosion of natural deposits, urban storm runoff

Note: The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Not all contaminants are tested for every year due to monitoring waivers and therefore we must use the most recent round of sampling. Some of our data is more than one year old, however, is limited to no older than 5 years.

Units:
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.
Picocuries per liter **(pCi/L) -** picocuries per liter is a measure of the radioactivity in water.
Micrograms per Liter **(µg/1)** – a measure of radioactivity in water.
Millirems per year **(mrem/year)** – a measure of radiation absorbed by the water.
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.

Definitions:
Action Level **(AL) -** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique **(TT) -** A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Million Fibers per Liter **(MFL) -** million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
Maximum Contaminant Level **(MCL) -** The 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 **(MCLG) -** The 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.
Drinking Water Equivalent Level **(DWEL)** – A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.
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 contaminants.
Running Annual Average **(RAA) -** The average of all monthly or quarterly samples for the last year at all sample locations.
Non Detect **(ND) -** The contaminant was not detected.
Not Applicable, Not Established **(N/A)**

IMPORTANT INFORMATION:

Lead *- Major Sources in Drinking Water: Corrosion of household plumbing systems; erosion of natural deposits.*
Health Effects Statement: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Copper *- Major Sources in Drinking Water: Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives*
Health Effects Statement: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink

water containing copper in excess of the action level over many years could, suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Fluoride: *Fluoride levels must be maintained between 1-2 ppm, for those water systems that fluoridate the water.*
Gross Alpha: *Since the results of our Gross Alpha samples registered above 5 pCi/L, our system was required to complete additional sampling for radium. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. The radium samples were found to be below the MCL.*
Lead/Copper: *Action levels are measured at consumer's tap. 90% of the tests must be equal to or below the action level; therefore, the listed results above have been calculated and are listed as the 90th percentile.*
Nitrate: *Because we detected Nitrate at a level over 5 ppm, we are required to include the following language: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.*
TTHM/HAA5: *Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water.*
Turbidity: *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.*

Since our system chlorinates its water, we are required to report our annual average for chlorine residual. Chlorine **Residual** was found to be **0.39 ppm**, with a range of 0.30 ppm to 0.50 ppm.

As you can see by the table, our system had no violations. We're proud that your drinking water meets all Federal and State requirements. The EPA has determined that your water IS SAFE at these levels.

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.

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, 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/Center of Disease Control (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).

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. We are 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 you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

We, at Lyme Regis, work hard to provide top quality water to every tap. Water is a limited resource so it is vital that we all work together to maintain it and use it wisely. We ask that all our customers help us protect and preserve our drinking water resources, which are the heart of our community, our way of life, and our children's future. Please contact us with any questions. Thank you for working together for safe drinking water.