

Annual Drinking Water Quality Report for 2015
Village of Cassadaga
22 Mill Street, PO Box 286
Cassadaga, NY 14718
Public Water Supply ID# NY 0600356

INTRODUCTION

To comply with State regulations, the Village of Cassadaga annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards and we are proud to report that our system did not violate a maximum contaminant level. The newly drilled Well #5 was not in use at all during the 2015 calendar year because of the methane detection during 2014. The Village is currently in the process of installing a methane treatment system and hopes to place Well #5 back into service in 2016. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerns about your drinking water, please contact Tom Fetter, Water Operator, at 716-595-3844 or the Village Offices at 716-595-3007. We want you to be informed about your drinking water. If you want to learn more please attend any of our regularly scheduled Village Board Meetings. The meetings are held in the Community Room on the 1st and 3rd Wednesday of every month at 7:00 PM.

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 650 people through 377 service connections. Our water system also serves the Lily Dale population and the Job Corps Center. Our water source consists of three groundwater wells. As mentioned previously, the new well (Well #5) is currently not in use. Well #4 is the primary production well meeting the water demands of the village. Well #1 is used to supplement the production of Well #4. Chlorine is added to our water before it is pumped into the distribution system. A sequestering agent, called Calciquest, is also being added to the water to reduce discoloration (brown water) caused by iron and manganese in the water reacting with chlorine.

The NYS DOH has completed a source water assessment for Wells #4 and #1, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. While some inorganic contaminants were detected in our water, it should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected.

The source water assessment has rated our two older wells as having a medium susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities (septic systems that discharge wastewater into the environment and are regulated by the state and/or federal government) to the wells and the associated activity in the assessment area. The wells draw from a confined aquifer. A copy of the assessment can be obtained by contacting us as noted above.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test 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.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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 EPA's Safe Drinking Water Hotline (800-426-4791) or the Chautauqua County Department of Health and Human Services at 716-753-4481.

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation	Date of Sample	Level Detected	Unit Measurement	Regulatory Limit MCL/AL	MCLG	Likely Source of Contamination
INORGANIC CONTAMINANTS							
Barium (Well #1)	No	5/5/15	0.053	mg/l	2(MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium (Well #4)	No	5/5/15	0.222	mg/l	2(MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium (Well #5)	No	5/5/15	1.19	mg/l	2(MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Iron (Well #1)	No	1/16/07	0.098	mg/l	0.3(MCL)	N/A	Naturally occurring.
Iron Well #4	No	1/16/07	0.18	mg/l	0.3(MCL)	N/A	Naturally occurring.
Manganese (Well #1)	No	1/16/07	0.02	mg/l	0.3(MCL)	N/A	Naturally occurring. Can be indicative of landfill contamination
Manganese (Well #4)	No	1/16/07	0.10	mg/l	0.3(MCL)	N/A	Naturally occurring. Can be indicative of landfill contamination
Nitrate (Well #1)	No	8/27/15	0.266	mg/l	10.0(MCL)	0	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion of natural deposits.
Nitrate (Well #4)	No	8/27/15	0.791	mg/l	10.0(MCL)	0	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion of natural deposits.
Fluoride (Well #5)	No	5/15/15	0.3	mg/l	2.2(MCL)	N/A	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Copper(2)	No	8/25/15-8/26/15	0.44; Range=0.0066-0.46	mg/l	1.3(AL)	1.3	Corrosion of household plumbing systems, Erosion of natural deposits;
Lead(1)	No	8/25/15-8/26/15	1.5; Range=ND-5.0	ug/l	15(AL)	0	Corrosion of household plumbing systems; Erosion of natural deposits.
Sulfate	No	11/28/01	15.9	mg/l	250(MCL)	N/A	Naturally occurring.
VOLATILE ORGANIC CONTAMINANT							
1,1,1-Trichloroethane (Well #1)	No	5/5/15 7/30/15 10/22/15	Avg.=0.833 Range=0.7-0.950	ug/l	5.0(MCL)	N/A	Discharge from metal degreasing sites and other factories
STAGE 2 DISINFECTION BYPRODUCTS (Bard Rd)							
Haloacetic Acids	No	8/28/14	2.22	ug/l	60(MCL)	N/A	By-products of drinking water chlorination.
Total Trihalomethanes	No	8/28/14	2.73	ug/l	80(MCL)	N/A	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic matter.
RADIOLOGICALS							
Radium 228 Well #5	No	5/15/14	1.09	Pci/L	5(MCL)	N/A	Erosion of natural deposits.
Radium 226 Well #5	No	5/15/14	0.66	Pci/L	5(MCL)	N/A	Erosion of natural deposits.
Gross Alpha Well #5	No	5/15/14	3.07	Pci/L	15(MCL)	0	Erosion of natural deposits.
Gross Beta(3) Well #5	No	5/15/14	1.77	Pci/L	8(MCL)	0	Decay of natural deposits and man-made emissions.
DISINFECTANTS							
Chlorine Residual Entry Point #1	No	Daily (2015)	Avg.=1.28 Range=0.27-2.20	mg/l	4(MCL)	N/A	Water additive used to control microbes
Chlorine Residual Entry Point #4	No	Daily (2015)	Avg.=1.01 Range=0.15-2.20	mg/l	4(MCL)	N/A	Water additive used to control microbes

OTHER CONTAMINANTS

Methane(4)	N/A	10/31/14	Present		N/A	N/A	Naturally occurring. Can be associated with oil & gas well drilling.
------------	-----	----------	---------	--	-----	-----	--

Notes:

1- The level presented represents the 90th percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the Lead values detected at your water system. In this case 10 samples were collected at your water systems and the 90th percentile value was calculated to be equal the second highest result value which was 2.0ug/l. The action level for Lead was not exceeded at any of the sites tested.

2- The level presented represents the 90th percentile of the 10 samples collected. Again the 90th percentile value was calculated to be equal the second highest result value for Copper which was 0.44mg/l. The action level for Copper was not exceeded at any of the sites tested

3- The NYSDOH considers 50 pCi/l to be the level of concern for beta particles.

4- Because methane gas quickly dissipates when it hits the air, it is very difficult to measure exactly how much is in the water; therefore it is being reported as present or absent.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): 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 that is 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.

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

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. Lead and copper were detected within the system but of the 10 samples collected none were found exceeding the action levels. We are however required to present the following information on Lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. High Acres Mobile Home Park 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.**

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2015, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. As stated prior, a problem was discovered with our newest well, Well #5, in the 2014 calendar year. Customers began to notice a lot of air in the water that caused it to look milky after filling a glass or pitcher, but cleared up after sitting. Testing indicated that the air was from methane gas. As soon as the Village learned of the test results, the new well was turned off. Currently, the village is supplying water from the two older wells which do not contain

methane. The Village will be installing a methane treatment system in 2016 so the new well can be placed back into service. Recently there have been a few areas in the village that are experiencing cloudy water also caused by air that clears after sitting. This was recently investigated and tested by the Chautauqua County Department of Health and Human Services and was found to be caused by a small leak in Well #1 plumbing, not from methane. Since Well #1 will need to be turned off in order to make these repairs, it will be completed after Well #5 is placed back into service,.

Drinking water that contains methane does not pose a risk to human health. The risk associated with methane in drinking water is that it may cause an explosive hazard if enough gas builds up inside a room where a water tap is running. Fortunately, the amount of methane present in the Village's water well was low enough that it did not pose an explosive hazard. Because drinking water containing methane does not create a direct health risk or any long- or short-term illness, it is not required to be tested by the New York State Health Department or EPA. However, after Well #5 is placed back into service, methane will be closely monitored to ensure the treatment is working properly.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ♦ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ♦ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ♦ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ♦ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ♦ Turn off the tap when brushing your teeth.
- ♦ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ♦ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions at 595-3007 or contact Thomas Fetter at 595-3844. Trustee Jeff Frick and Bill Astry have been appointed as trustees in charge of water this year.

We have recently awarded the bid for the Methane Removal System to H&K Services, Inc. in the amount of \$218,200. This is the same contractor who installed the water tank, booster station, High Street and Bard Road waterlines.

Construction should begin sometime in May 2016 and should be completed within 120 days. Well # 5 shall be online after the completion.

We plan on replacing the water lines on Mill Street in the next couple of years when we can save enough money. We apologize for the delay, but the methane had to be corrected first.

A water grant application will be submitted to the NYS Environmental Facilities Corporation in the near future. We are hoping that they will refinance our loan to USDA Rural Development to a 0% interest loan saving us over 1.5 million dollars in interest. We are also submitting for short term financing to cover the Methane Removal System also.

We have also submitted a grant application to Senator Catherine Young for electronic water meters to replace the aging meters throughout the village. A leak detection was done on our system to see where we are losing millions of gallons annually. It was determined that there were no leaks but our aging meters do not calculate the amount of water used.

The Water Rates for the upcoming will continue to be billed with a structure of a \$95.00 debt service per Dwelling Unit and a water usage rate of \$4.00 per thousand gallons. Partial payments will be accepted by the Village Clerk with total to be paid within 60 days; henceforth after that date a Shut Off notice will be issued. Any unpaid water bills in arrears over nine months as of April 1st shall be included in the annual tax levy. Because of time restraints with not having a Utility Worker all water bills for June will have an estimated reading.

This institution is an equal opportunity provider, and employer