Annual Drinking Water Quality Report for 2013
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 most of the State drinking water health standards. We detected a presence of Coliform bacteria on 9/3/13. Five additional samples were subsequently collected after the date the bacteria was detected, Coliform bacteria was **NOT** detected in any of the samples. It should be noted that E. coli, associated with human and animal fecal waste, was not detected in any of the samples collected. The probable source of the Coliform bacteria on 9/3/13 probably came from contaminated faucet tap and/or sample bottle. 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, concerns about your drinking water or a water emergency, please contact Tom Fetter, Water Operator, at 716-595-3844. 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 7:00PM. The second meeting will be devoted primarily to our water project.

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 760 people through 370 service connections. Our water system also serves the Lily Dale population and the Job Corps Center. Our water source consists of three groundwater wells. Our new Well #5 was put on line in February 2014. It is now meeting the demands of the village pumping approximately 87,000 – 98,000 gallons per day. This well is 436 feet deep and pumps 230 gallon per minute. Well #4 is used to supplement the new production well and runs for an hour a day pumping 8,000 gallons. Well #1 is used to supplement the production of Well #5 during drought, high water demand periods or other emergency situations. Chlorine is added to our water before it is pumped into the distribution system. A sequestering agent, Calciquest, is also being added to the water to reduce the discoloration to the iron and manganese in the water reacting with the chlorine.

The NYS DOH has completed a source water assessment for this system, 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.

As mentioned before, our water is derived from 2 drilled wells. The source water assessment has rated these 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 Health Department at 716-753-4481.

Table of Detected Contaminants

Contaminant	Violation	Date of Sample	Level Detected	Unit Measure-ment	Regulatory Limit MCL/AL	MCLG	Likely Source of Contamination
INORGANICS CONTAMINANTS							
Barium Well #1	No	9/18/12	0.061	mg/l	2 (MCL)	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium Well #4	No	9/18/12	0.291	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[1]	mg/l	0.3[2]	N/A	Naturally occurring.
Manganese Well #1	No	1/16/07	0.02[1]	mg/l	0.03[2]	N/A	Naturally occurring. Can be indicative of landfill contamination
Iron Well #4	No	1/16/07	0.18[1]	mg/l	0.3[2]	N/A	Naturally occurring.
Manganese Well #4	No	1/16/07	0.10[1]	mg/l	0.03[2]	N/A	Naturally occurring. Can be indicative of landfill contamination
Copper	No	7/18/12	0.270;[2] Range 0.018-0.45	mg/l	1.3 (AL)[1]	1.3	Corrosion of household plumbing systems, Erosion of natural deposits;
Lead	No	7/18/12	3.4;[2] Range ND-22.0	ug/l	15 (AL)[1]	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.
Nitrate Well #1	No	8/2213	0.83	mg/l	10.0 (MCL)	0	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion of natural deposits.
Nitrate Well #4	No	8/22/13	0.31	mg/l	10.0 (MCL)	0	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion of natural deposits.
DISINFECTION BYPRODUCTS							
Haloacetic Acids	No	8/22/13	18.9	ug/l	60 (MCL)	N/A	By-products of drinking water chlorination.
Trihalomethanes	No	8/22/13	40.3	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 1	No			Pci/L	5 (MCL)	N/A	Erosion of natural deposits.
Radium 228 Well 2	No			Pci/L	5 (MCL)	N/A	Erosion of natural deposits.
MICROBIOLOGICAL CONTAMINANTS							
Total Coliform	Yes	9/3/13	1 positive sample	N/A	MCL=1 or more positive	0	Naturally present in the environment

					samples in 1 month		
DISINFECTANTS							
Chlorine Residual Entry Point #1	No	Daily (2013)	Avg.-1.57 Range 0.02-2.20	mg/l	4 (MCL)	N/A	Water additive used to control microbes
Chlorine Residual Entry Point #4	No	Daily (2013)	Avg.-1.43 Range 0.13-2.20	mg/l	4 (MCL)	N/A	Water additive used to control microbes

Notes:

1- If iron and manganese are both present, the total concentration of both should not exceed 0.5 mg/l.

2-The level presented represents the 90th percentile of the 10 sites tested during 2012. 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 or copper values detected at your water system. The action level for copper was not exceeded at any of the sites. However, the action level for Lead was exceeded at one of the sample sites.

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?

The table shows that our system uncovered a problem this year. The table shows that we had a MCL violation for Total Coliform bacteria. We detected the presence of the bacteria on 9/3/13. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliform bacteria were found in more samples than allowed and this was a warning of potential problems. Five additional samples were subsequently collected after the date the bacteria were detected; Total Coliform was **NOT** detected in any of those samples. It should be noted that E. coli, associated with human and animal fecal waste, was not detected in any of the samples collected. The probable source of Total Coliform on this occasion probably came from a contaminated faucet tap and/or a sample bottle. We will continue to improve our water treatment facilities so as to provide the highest of quality drinking water possible.

Is our water system meeting other rules that govern operations?

During 2013, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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

The Village of Cassadaga is happy to announce that the Capital Water Project was completed with the new well going on line in February 2014. This past year the new Water Treatment Plant was constructed, distribution lines from well to Maple Avenue were completed and new waterlines on North Shore Park.

Stearns & Wheler (GHD) continued as our engineering firm with Greg McCorkhill as our representative. We were saddened when we lost Bob Armstrong as their representative when he passed away suddenly in the beginning of 2013. We will be having a dedication of our Water Treatment Plant and our Capital Water Project in the next couple of months and will be dedicating the Water Treatment Plant in memory of Bob Armstrong.

USDA Rural Development will be converting our BANS to a long term loan to cover the next 35 years with principal of $3,785,000 plus interest of $1,743,350.68 at 2.50% interest rate.

Contract #5 was awarded in 2013 to Kandey Company at total cost of $554,635.78. This contract was for the construction of the Water Treatment Plant, distribution lines to Maple Avenue, and replacement of waterlines on North Shore Park.

Contract # 6 was awarded to Ahlstrom Schaeffer Electric Company for the electrical and HVAC for the Water Treatment Plant and upgrade to Booster Station on High Street with a generator. The total of this contract was $197,020.00.

The total Expenditures for the Capital Water Project was $4,034,565.00.

Our Water Department replaced many water meters in the village this past year and will continue to do so as defective ones occur. We ask for your cooperation in this matter to speed the process. We are also looking at the cost of electronic water meters for the village.

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 $3.75. We have changed penalty date for unpaid water to the 30th of billing month and will continue to bill June 1st and December 1st. 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.

Thank you for allowing us to continue to provide your family with quality drinking water this year. Trustees Jeff Frick and Ron DeChard have been appointed this year in charge of Water Department. Please call the office at 595-3007, Thomas Fetter at 595-3844 or a Village Board Member with any questions.