

Annual Drinking Water Quality Report for 2016 Sandy Creek/Lacona Joint Water Works (JWW) & Sandy Creek Water District #2

P.O. Box 240, Sandy Creek, NY 13145
(Public Water Supply ID# NY3704365 & 3730203)

INTRODUCTION

To comply with State regulations, the Sandy Creek/Lacona JWW will be annually issuing 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. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. 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 concerning your drinking water, please contact Grant Rohmoser, Mayor of the Village of Sandy Creek at (315) 387-5781 or Peggy Manchester, Mayor of the Village of Lacona at (315) 387-5539. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled monthly meetings. Please call your village office for the exact time and location.

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 Departments 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 1500 people which includes 652 service connections. This system population includes customers within the village limits of Sandy Creek, Lacona and outside service connections in the Town of Sandy Creek. The JWW now has two separate sources or well fields. The Cable Trail well field consists of one drilled and three dug wells and the Hanson well field consists of two drilled wells. Water from the Hanson wells is also filtered with greensand media to remove iron and manganese. The well water is pumped into a 300,000-gallon water tower storage tank. The JWW has an average daily production of 160,000 gallons. The water is disinfected with liquid sodium hypochlorite (chlorine) prior to distribution.

SOURCE WATER ASSESSMENT

The NYSDOH has completed a source water assessment for this system. Possible and actual threats to this drinking water source were evaluated by reviewing limited existing mapped data and available information from past sanitary surveys. The state source water assessment provides a susceptibility rating based on the potential risk posed by each possible source of contamination and how easily contaminants could 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. See section "*Are there contaminants in our drinking water?*" for a list of the contaminants that have been detected. The source water assessment was completed to provide owners and operators with additional information to help them protect your source waters into the future.

As mentioned above, our water is derived from four drilled wells that draw from an unconfined aquifer with an unknown hydraulic conductivity. The source water assessment rated these wells as having a high susceptibility

rating for viruses, protozoa, bacteria, and nitrates due to the location of nearby septic systems and land use activities. They were also assigned a medium-high risk rating for petroleum products, halogenated solvents, pesticides, metals, and other industrial organics due to the unconfined aquifer. No other significant sources of possible contamination were identified.

Please note that the finished water delivered into your home meets the New York State's drinking water standards for microbial contamination. Petroleum and organic products have never been detected in the source water from any wells. County and state health departments will use this risk assessment information to direct future source water protection activities. These may include water quality monitoring, wellhead protection, resource management, planning, and education programs. A copy of the assessment can be obtained by contacting us, as noted below.

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, disinfection byproducts, radioactive contaminants and synthetic organic compounds. Our system sampled for total coliform, disinfection byproducts, radiological contaminants, inorganic constituents and nitrate in 2015. 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 Oswego County Health Department at (315) 349-3557.

TABLE OF DETECTED COMPOUNDS

Contaminant	Violation Y/N	Date of Sample	Level Detected (Maximum) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL)	Likely Source of Contamination
Inorganic Contaminants							
Nitrate (as Nitrogen) (Hansen Wells)	No	8/10/16	330	ug/l	10,000 ug/l	10,000 ug/l	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate (as Nitrogen) (Original Wells)	No	8/10/16	820	ug/l			
Barium (Hansen Wells)	No	6/14/16	20.0	ug/l	2,000 ug/l	2,000 ug/l	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Barium (Original Wells)	No	6/14/16	17.8	ug/l	2,000 ug/l	2,000 ug/l	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chloride (Hansen Wells)	No	11/9/15	5.81	mg/l	N/A	250 mg/l	Naturally occurring or indicative of road salt contamination
Manganese (Hansen Wells – Finished Water)	No	6/14/16	8.5	ug/l	N/A	300 ug/l	Naturally occurring; Indicative of landfill contamination.
Sulfate (Hansen Wells)	No	11/9/15	4.94	mg/l	N/A	250 mg/l	Naturally occurring
Sodium (Hansen Wells)	No	6/14/16	4.9	mg/l	N/A	N/A ****	Naturally occurring; Road Salt; Water Softeners; Animal Waste
Sodium (Original Wells)	No	6/14/16	4.5	Mg/l	N/A	N/A ****	Naturally occurring; Road Salt; Water Softeners; Animal Waste
Lead ** 90 th percentile	No	9/8/14	2.35 Range: 0.5 - 6.2	ug/l	0 ug/l	AL = 15 ug/l	Corrosion of household plumbing systems, erosion of natural deposits
Copper * 90 th percentile	No	9/8/14	88.8 Range: 7 - 96.2	ug/l	1,300 ug/l	AL = 1,300 ug/l	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Zinc (Hansen Wells)	No	6/14/16	10	ug/l	N/A	5,000 ug/l	Naturally occurring; Mining waste
Zinc (Original Wells)	No	6/14/16	11	ug/l	N/A	5,000 ug/l	Naturally occurring; Mining waste

Radioactive Contaminants							
Combined Radium-226 & 228 (Original Wells)	No	12/10/15	0	pCi/l	0 pCi/l	5 pCi/l	Erosion of natural deposits
Combined Radium-226 & 228 (Hansen Wells)	No	2014 & 2015	0.26 Range: 0 – 1.04	pCi/l			
Gross Alpha (Original Wells)	No	12/10/15	0.203	pCi/l	0 pCi/l	15 pCi/l	Erosion of natural deposits
Gross Alpha (Hansen Wells)	No	2014 & 2015	0.838 Range: 0.51 – 1.19	pCi/l			
Gross Beta (Original Wells)	No	12/10/15	0.694	pCi/l	0 pCi/l	50 *** pCi/l	Decay of natural deposits and man-made emissions
Gross Beta (Hansen Wells)	No	1/14/15	2.49	pCi/l			
Disinfection By-Products							
TTHMs (Total Trihalomethanes)	No	8/10/16	9.5	ug/l	N/A	80 ug/l	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
HAA5s (Haloacetic Acids)	No	8/11/15	3.0	ug/l	N/A	60 ug/l	By-product of drinking water disinfection needed to kill harmful organisms

Notes:

* - 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 copper values detected at your water system. In this case, ten samples were collected at your water system and the 90th percentile value was the 9th highest value. The action level for copper was not exceeded at any of the sites tested.

** - The level presented represents the 90th percentile of the ten samples collected. The action level for lead was not exceeded at any of the sites tested.

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

**** - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets.

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.

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

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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2016, our system was in compliance with applicable State drinking water operating 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.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend 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 several 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 firefighting 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. Rate adjustments may be necessary in order to address these improvements. 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.