

***Annual Drinking Water Quality Report for 2016***  
***Wilton Water & Sewer Authority***  
***20 Traver Road, Gansevoort NY 12831***  
***Public Water Supply ID#NY4500186***

**INTRODUCTION**

To comply with State regulations, Wilton Water and Sewer Authority (WWSA) 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: Mr. Mike Mooney Director of the Wilton Water and Sewer Authority, at (518) 581-8626. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled board meetings held on the 3<sup>rd</sup> Tuesday of every month at 4:00 PM at the Wilton Town Hall, 22 Traver Road, Gansevoort, NY 12831.

**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.

The WWSA draws its water from "groundwater" sources. Groundwater or well water is stored below the surface of the earth in deep, porous rocks called "aquifers." Groundwater is purified naturally as it filters through layers of soil, clay, rock and sand. This process, known as "percolation" takes years to complete. As a result, groundwater requires less treatment than surface water. Our Mulberry well field consists of 11 wells ranging in depth from 26 feet to 202 feet with yields on the various wells from 26 to 93 gallons per minute (gpm). Our Fairway well field consists of 9 wells ranging in depth from 70 feet -75 feet with yields of 40 gpm- 60 gpm. Treatment of the raw water produced by the wells at the Mulberry and Fairways Treatment Plants consists of chlorination with sodium hypochlorite which is used for disinfection to protect against contamination from harmful bacteria and other organisms. We have a 330,000 gallon storage/contact tank where the chlorine is added providing the necessary time to achieve adequate disinfection. At the Mulberry plant we have a 6,000 gallon hydro tank from which water is pumped with our high lift pumps. We also have a 330,000 gallon storage tank providing water into the distribution system utilizing one 15 horsepower (hp) centrifugal pump and three 25 hp centrifugal pumps to maintain pressure in the distribution system. At the Fairway Plant water is pumped from a 275,000 gallon in-ground concrete storage/contact tank with high lift pumps into the distribution system. One 15 hp, 120 gpm pump and two 25 hp 250 gpm pumps to maintain distribution system pressure. Both facilities have gas driven generators in the event of power outage.

Our O'Brien Treatment Plant on Jones Road which came on-line in late 2007 consists of 5 wells. The water is disinfected with sodium hypochlorite and flows into 750,000 gallon tank before being pumped into the distribution system.

We have an interconnection with the Saratoga County Water Authority's main transmission line. We have been purchasing 300,000 gallons of water per day. The water source for the SCWA is the Hudson River. Water treatment consists of addition of coagulant, powder activated carbon and filtration through 0.1 micron membrane filters. Caustic soda is added for pH adjustment and phosphate is added for corrosion control. Sodium hypochlorite is added for disinfection and to maintain a residual through the transmission system. There is a one 1 million-gallon water storage tank (clearwell) at the water plant. This tank provides contact time for proper disinfection of water and provides storage for our pumping and transmission system. The water treatment plant has been in service since February of 2010. A new carbon filtration system utilizing granular activated carbon has been added to the treatment process to reduce the levels of disinfection byproducts.

WWSA also purchases water from the City of Saratoga Springs that serves the Exit 15 commercial corridor. The areas served by the City of Saratoga Springs water supply are the Home Depot Plaza and Floral Estates. The other areas in the Exit 15 commercial corridor are supplied by WWSA water supply. The City of Saratoga Springs operates a surface water filtration plant utilizing water from Loughberry Lake and Bog Meadow Brook as their source waters. The treatment process

consists of sodium permanganate, during the summer and early fall, to address taste and odor issues, injection of the raw water with polyaluminum chloride coagulant as it flows to 2 parallel rapid mix basins. After coagulant addition, the water undergoes flocculation. Each train consists of a 3-stage 88,000 gallon flocculation basin (coagulation/flocculation causes small particles to stick together when the water is mixed forming larger heavier particles). A 157,000 gallon basin containing tube settlers allows the newly formed larger particles to settle out naturally in tube settlers. The plant has 4 dual media filter. The filter bed consists of anthracite coal and sand which removes smaller particles by trapping them in the spaces between the sand grains. The water is then disinfected with ultraviolet light and sodium hypochlorite before it is pumped into the distribution system. Fluoride is also added for the prevention of tooth decay.

#### **FACTS AND FIGURES**

Our water system serves approximately 9,930 people through 3,310 service connections. The total amount of water produced in 2016 was 403,676,000 gallons. The daily average of water treated and pumped into the distribution system was 1,105,962 gallons per day. Our highest single day consumption was 1,990,000 gallons. The amount of water sold and delivered to customers was 369,157,280 gallons. This leaves the total unaccounted water to be 34,518,720 gallons (8.55%). This is from: unmetered public buildings, firefighting & training, main flushing and street cleaning account for 12,482,000 gallons (3.15%) of the unmetered usage. The remaining 12,110,280 gallons or (3.00%) is due to meter under-registration. In 2016, water customers were charged \$3.95 per 1,000 gallons of water. The average annual charge for water is \$270.39.

#### **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, your drinking water is tested for numerous contaminants. These contaminants include: inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, disinfection byproducts, radiological and synthetic organic compounds. In addition, we test 9 samples for coliform bacteria monthly. 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 New York State Department of Health Glens Falls district office at (518) 793-3893.

#### **WHAT DOES THIS INFORMATION MEAN?**

As you can see by the tables on pages 3-5, our system had no MCL 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. 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.

#### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2016, the Wilton Water and Sewer Authority was in compliance with applicable State drinking water operating and reporting requirements. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2016, we "did not monitor or test" or "did not complete all monitoring or testing" for the 3<sup>rd</sup> quarter disinfection byproducts and therefore cannot be sure of the quality of your drinking water during that time. We were issued a notice of violation for not completing this testing. We collected our 1<sup>st</sup> quarter disinfection byproducts in February 2017 and these were below the Maximum Contaminant Level.

#### **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) or at <http://www.epa.gov/safewater>.

#### **INFORMATION ON FLUORIDE ADDITION**

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. Fluoride is added to your water by the City of Saratoga Springs before it is delivered to us. The customers served by the Home Depot Plaza receive this fluoridated water. Those that get their water from the WWSA do not receive fluoridated water. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, the City of Saratoga Springs monitors fluoride

levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/l. During 2016 monitoring showed that fluoride levels in your water were within 0.2 mg/l of the target level for 97% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

**INFORMATION ON LEAD**

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. The WWSA 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 or at <http://www.epa.gov/safewater/lead>

**WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

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 gallons to 20 gallons a day. Fix it 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.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

Follow the water conservation measures implemented by the Wilton Water and Sewer Authority to conserve outside water use. For July, August and September odd numbered homes on odd days can use outside water from 7-9 AM and 7-9 PM while even numbered homes on even days can use outside water from 7-9 AM and 7-9 PM.

**SYSTEM IMPROVEMENTS**

The following improvements were made to the water system in 2014:

- Added 10,800 feet of new 12 inch and 8 inch water main from Perry & Old Gick Road ton Ingersol Road and continuing t the Town & City Line on Ingersol

**WATER SYSTEM SECURITY**

We ask that our customers be diligent and report any unusual activity they may see involving the water system such as tampering with a hydrant or taking water without the use of a meter. Please report this to our office immediately.

**CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. 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.

| Table of Detected Contaminants<br>Wilton Water & Sewer Authority PWS ID#NY4500186 |                  |                |                                |                  |      |                                  |                                                                       |
|-----------------------------------------------------------------------------------|------------------|----------------|--------------------------------|------------------|------|----------------------------------|-----------------------------------------------------------------------|
| Contaminant                                                                       | Violation Yes/No | Date of Sample | Level Detected                 | Unit Measurement | MCLG | Regulatory Limit (MCL, TT or AL) | Likely source of Contamination                                        |
| <b>Inorganic Contaminants</b>                                                     |                  |                |                                |                  |      |                                  |                                                                       |
| Arsenic (Fairways)                                                                | N                | 9/28/16        | 1.1                            | ppb              | N/A  | 10                               | Erosion of natural deposits                                           |
| Chloride (O'Brien)                                                                | N                | 8/17/16        | 111                            | ppm              | N/A  | 250                              | Geology; Naturally occurring                                          |
| Chloride (Mulberry)                                                               | N                | 8/17/16        | 110                            |                  |      |                                  |                                                                       |
| Chloride (Fairways)                                                               |                  | 9/28/16        | 99.9                           |                  |      |                                  |                                                                       |
| Barium (O'Brien)                                                                  | N                | 8/17/16        | 56                             | ppb              | 2000 | 2000                             | Erosion of natural deposits                                           |
| Barium (Mulberry)                                                                 |                  |                | 17                             |                  |      |                                  |                                                                       |
| Barium (Fairways)                                                                 |                  | 9/28/16        | 53                             |                  |      |                                  |                                                                       |
| Copper range                                                                      | N                | 9/17/14        | 0.07 <sup>1a</sup><br>ND-0.17  | ppm              | 1.3  | AL=1.3                           | Corrosion of household plumbing systems; erosion of natural deposits; |
| Copper (Exit 15 Corridor) range                                                   | N                | 9/18/15        | 0.18 <sup>b</sup><br>0.03-0.22 |                  |      |                                  |                                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |                                          |                                 |       |              |                                        |                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------|---------------------------------|-------|--------------|----------------------------------------|----------------------------------------------------------------------------------------------|
| Lead range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   | 9/17/14                                  | ND <sup>2a</sup><br>ND-2        |       | 0            | AL=15                                  | Corrosion of household plumbing systems, erosion of natural deposits                         |
| Lead (Exit 15 Corridor) range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | N | 9/18/15                                  | 0.75 <sup>2b</sup><br>ND-1      | ppb   |              |                                        |                                                                                              |
| Manganese (O'Brien)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | N | 8/17/16                                  | 14                              | ppb   | N/A          | 300                                    | Geology; Naturally occurring                                                                 |
| Manganese (Fairways)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   | 9/28/16                                  | 13.6                            |       |              |                                        |                                                                                              |
| Nitrate (as Nitrogen) Fairway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | N | 9/28/16                                  | 1.19                            | ppm   | 10           | 10                                     | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits  |
| Nitrate (as Nitrogen) Mulberry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   | 8/17/16                                  | 0.776                           |       |              |                                        |                                                                                              |
| Nitrate (as Nitrogen) O'Brien                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   | 8/17/16                                  | 1.14                            |       |              |                                        |                                                                                              |
| Sodium <sup>3</sup> (O'Brien)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | N | 8/17/16                                  | 64.2                            | ppm   | N/A          | N/A                                    | Naturally Occurring, Road salt                                                               |
| Sodium <sup>3</sup> (Mulberry)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   | 8/17/16                                  | 39.9                            |       |              |                                        |                                                                                              |
| Sodium <sup>3</sup> (Fairways)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   | 9/28/16                                  | 64.4                            |       |              |                                        |                                                                                              |
| Sulfate (O'Brien)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | N | 8/17/16                                  | 20.6                            | ppm   | N/A          | 250                                    | Naturally Occurring,                                                                         |
| Sulfate (Mulberry)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   | 8/17/16                                  | 19.1                            |       |              |                                        |                                                                                              |
| Sulfate (Fairways)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   | 9/28/16                                  | 22.3                            |       |              |                                        |                                                                                              |
| <b>Radiological Contaminants</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |                                          |                                 |       |              |                                        |                                                                                              |
| Radium 226 (O'Brien)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | N | 4/23/15                                  | 0.17                            | pCi/L | 0            | 5                                      | Erosion of natural deposits                                                                  |
| Radium 228 (O'Brien)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | N | 4/23/15                                  | 0.44                            | pCi/L | 0            | 5                                      | Erosion of natural deposits                                                                  |
| Radium 228 (Mulberry)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   | 8/17/16                                  | 0.460                           |       |              |                                        |                                                                                              |
| <b>Stage 2 Disinfection Byproducts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |                                          |                                 |       |              |                                        |                                                                                              |
| HAA5 (Haloacetic Acids) 2 sample sites<br>Avg<br>Range of values                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N | 11/23/15<br>2/3/16<br>5/19/16<br>8/17/16 | 41.6 <sup>4</sup><br><br>ND-44  |       |              |                                        |                                                                                              |
| TTHM [Trihalomethanes] Exit 15 Panera Bread                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | N | 8/17/16                                  | 1.2                             | ppb   | 0            | 80                                     | By-product of drinking water chlorination                                                    |
| TTHM [Trihalomethanes] 2 sample sites<br>range of values                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N | 11/23/15<br>2/3/16<br>5/19/16<br>8/17/16 | 62.4 <sup>4</sup><br><br>1.2-59 |       |              |                                        |                                                                                              |
| Chlorine Residual (average) (range)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | N | Daily testing                            | 1.02<br>0.35-1.44               | ppm   | MRDLG<br>N/A | MRDL<br>4                              | Used in the treatment and disinfection of drinking water                                     |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |                                          |                                 |       |              |                                        |                                                                                              |
| 1a-The level presented represents the 90th percentile of the 20 samples collected. The action level for copper was not exceeded at any of the 20 sites tested in September 2014. 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. In this case, 20 samples were collected at your water system and the 90 <sup>th</sup> percentile value was the third highest value (0.07 ppm) for the September 2014 copper sampling. |   |                                          |                                 |       |              |                                        |                                                                                              |
| 1b-The level presented represents the 90 <sup>th</sup> percentile of the 5 samples collected from the Exit 15 commercial corridor. The action level was not exceeded for copper at any of the 5 sites collected in September 2016.                                                                                                                                                                                                                                                                                                                                                                          |   |                                          |                                 |       |              |                                        |                                                                                              |
| 2a -The level presented represents the 90th percentile of the 20 samples collected. (same comment as above) The action level for lead was not exceeded at any of the 5 sites tested September 2014.                                                                                                                                                                                                                                                                                                                                                                                                         |   |                                          |                                 |       |              |                                        |                                                                                              |
| 2b-The level presented represents the 90 <sup>th</sup> percentile of the 5 samples collected from the Exit 15 commercial corridor. The action level was not exceeded at any of the 5 sites collected September 2016.                                                                                                                                                                                                                                                                                                                                                                                        |   |                                          |                                 |       |              |                                        |                                                                                              |
| 3 - Water containing more than 20 ppm should not be consumed by persons on severely restricted sodium diets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |   |                                          |                                 |       |              |                                        |                                                                                              |
| 4- The average value presented represents the highest LRAA for 2016. The highest LRAA for the TTHM was in the 1 <sup>st</sup> quarter while the highest LRAA for the HAA5s was in the 2 <sup>nd</sup> quarter of 2016.                                                                                                                                                                                                                                                                                                                                                                                      |   |                                          |                                 |       |              |                                        |                                                                                              |
| <b>Table of Detected Contaminants<br/>City of Saratoga Springs PWS ID# NY4500168</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |                                          |                                 |       |              |                                        |                                                                                              |
| <b>Inorganic Contaminants</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |                                          |                                 |       |              |                                        |                                                                                              |
| Barium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | N | 11/8/16                                  | 53                              | ppb   | 2000         | 2000                                   | Erosion of natural deposits                                                                  |
| Fluoride                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N | 11/8/16                                  | 0.671                           | ppm   | N/A          | 2.2                                    | Water additive to promote strong teeth;                                                      |
| Nitrate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N | 11/8/16                                  | 0.734                           | ppm   | 10           | 10                                     | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits. |
| <b>Organic Contaminants (monthly samples for 2016)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |   |                                          |                                 |       |              |                                        |                                                                                              |
| Total Organic Carbon<br>Range of samples treated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N | 2016                                     | 1.2-3.0                         | ppm   | N/A          | TT                                     | Organic material both natural and man made                                                   |
| Dibromomethane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N | 12/9/16                                  | 1.24                            | ppb   | N/A          | 5                                      | Solvent for fats, used in gauges; component in fire extinguishers                            |
| <b>Microbiological Contaminants</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |                                          |                                 |       |              |                                        |                                                                                              |
| Turbidity (Highest Value) <sup>1</sup><br>2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N | 4/20/16                                  | 0.290<br>100%                   | NTU   | N/A          | TT=1.0 NTU<br>TT= 95% samples<br>< 0.3 | Soil runoff                                                                                  |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |                                          |                                 |       |              |                                        |                                                                                              |
| 1. Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest-level detected. Our highest single turbidity measurement for the year was on 4/20/ 16. State regulations require that entry point turbidity must always be below 1.0 NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU.                                                                                                                           |   |                                          |                                 |       |              |                                        |                                                                                              |

| SARATOGA COUNTY WATER AUTHORITY<br>Public Water Supply Identification Number NY4530222<br>Table of Detected Contaminants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                   |                               |                  |        |                                  |                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|-------------------------------|------------------|--------|----------------------------------|---------------------------------------------------------------------------------------------|
| Contaminant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Violation Yes/No | Date of Sample    | Level Detected                | Unit Measurement | MCLG   | Regulatory Limit (MCL, TT or AL) | Likely source of Contamination                                                              |
| <b>Inorganic Contaminants</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                   |                               |                  |        |                                  |                                                                                             |
| Barium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | N                | 11/14/16          | 6.0                           | ppb              | 2000   | 2000                             | Erosion of natural deposits                                                                 |
| Chloride                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | N                | 1/22/13           | 10.8                          | ppm              | N/A    | 250                              | Geology; Naturally occurring                                                                |
| Manganese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | N                | 1/22/13           | 12                            | ppb              | N/A    | 300                              | Geology; Naturally occurring                                                                |
| Nitrate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | N                | 2/24/16           | 130                           | ppb              | 10,000 | 10,000                           | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | N                | 2/22/10           | 4                             | ppb              | 1,0000 | 1,0000                           |                                                                                             |
| Sodium <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N                | 1/22/13           | 8.44                          | ppm              | N/A    | N/A                              | Geology; Road Salt                                                                          |
| Sulfate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | N                | 1/22/13           | 3.8                           | ppm              | N/A    | 250                              | Naturally occurring                                                                         |
| Zinc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | N                | 1/22/13           | 21                            | ppb              | N/A    | 5000                             | Naturally occurring                                                                         |
| <b>Microbiological Contaminants</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                   |                               |                  |        |                                  |                                                                                             |
| Turbidity (Highest Value) <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | N                | 11/14/16          | 0.158                         | NTU              | N/A    | TT=1.0 NTU                       | Soil runoff                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |                   | 100%                          |                  |        | TT= 95% samples < 0.3            |                                                                                             |
| <b>Total Organic Carbon (TOC) samples from 2016</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                   |                               |                  |        |                                  |                                                                                             |
| TOC (average)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N                | Quarterly samples | 3.6 Avg.raw<br>1.6 Avg treat. | ppm              | N/A    | TT                               | Naturally present in the environment                                                        |
| Notes:<br>1. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets.<br>2. Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest-level detected. Our highest single turbidity measurement for the year 11/14/16 (0.158 NTU). State regulations require that entry point turbidity must always be below 1.0 NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU and complied 100% of the time. |                  |                   |                               |                  |        |                                  |                                                                                             |

**Glossary of Terms:**

*Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.*

*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.*

*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.*

*90<sup>th</sup> Percentile Value- The values reported for lead and copper represent the 90<sup>th</sup> percentile. 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 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system*

*Action Level - 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.*

*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*

*Locational Running Annual Average (LRAA) - The LRAA is calculated each quarter by taking the average of the four most recent samples collected at each site*

*N/A- Not applicable*

As illustrated in the tables above, WWSA monitoring and testing detected some contaminants; all other contaminants were below the maximum levels permitted by the State, known as the maximum contaminant levels (MCL). Many of the test results were **NON DETECTABLE**. The type/group (number of contaminants in each group) tested for were as follows: volatile organic compounds (52) + MTBE, synthetic organic compounds (38), asbestos, color & odor (O'Brien only) The inorganic contaminants tested for and non detectable were, arsenic, cadmium, chromium mercury, silver, selenium, antimony, beryllium, thallium, and cyanide. Microbiological Contaminants (2) total coliform and E. coli.

As illustrated in the tables above, the City of Saratoga Springs monitoring and testing detected some contaminants; all other contaminants were below the maximum levels permitted by the State, known as the maximum contaminant levels (MCL). Many of the test results were **NON DETECTABLE**. The type/group (number of contaminants in each group) tested for were as follows: volatile organic compounds (52) + MTBE, synthetic organic compounds (38), asbestos, color. The inorganic contaminants tested for and non detectable were, arsenic, cadmium, chromium, manganese, mercury, silver, zinc, antimony, nickel thallium, and cyanide. Microbiological Contaminants (2) Total Coliform and *E. coli*. Radiological contaminants (3) gross alpha, radium 226 and radium 228.

Also illustrated in the tables above, the Saratoga County Water Authority monitoring and testing detected some contaminants; all other contaminants were below the maximum levels permitted by the State, known as the maximum contaminant levels (MCL). Many of the test results were **NON DETECTABLE**. The type/group (number of contaminants in each group) tested for were as follows: volatile organic compounds (52) + MTBE, synthetic organic compounds (38), asbestos, color. The inorganic contaminants tested for and non detectable were, arsenic, cadmium, chromium, mercury, nickel, silver, zinc, antimony, beryllium, thallium, and cyanide. Microbiological Contaminants (2) Total coliform, *E. coli*. Radiological contaminants (3) gross alpha, radium 226 and radium 228.

**Town of Wilton Water & Sewer Authority**  
**PWSID # NY4500186**  
**SWAP Summary**

The NYS DOH has completed a source water assessment for these systems, based on available information. Possible and actual threats to the drinking water sources 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 or surface water supplies. The susceptibility rating is an estimate of the potential for contamination of a given source water. It does not mean that the water delivered to consumers is, or will become contaminated. A list of contaminants detected, if any, are listed in the section entitled "Are their contaminants in our drinking water?" The source water assessments provide resource managers with additional information for protecting source waters into the future.

The Fairways and Mulberry assessments have rated our ground water sources as having an elevated susceptibility to microbials and nitrates. These ratings are due primarily to close proximity of the wells to permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the residential land use in the assessment area. In addition, the wells draw from fractured bedrock and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

**City of Saratoga Springs**  
**PWSID # NY4500168**  
**SWAP Summary**

The NYS DOH has completed source water assessments for both the Bog Meadow Brook and Loughberry Lake Watershed systems based on available information. Possible and actual threats to these drinking water sources were evaluated. The State source water assessments include a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the environment. 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, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The Loughberry Lake Watershed assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of pasture in the assessment area results in a medium potential for protozoa contamination, and the amount of residential lands in the assessment area results in an elevated potential for microbials contamination. A single non-sanitary wastewater discharge is unlikely to contribute to contamination. There are no noteworthy contamination threats associated with other discrete contaminant sources. Finally, it should be noted that hydrologic characteristics (e.g. basin shape and flushing rates) generally make reservoirs highly sensitive to existing and new sources of phosphorus and microbial contamination.

The Bog Meadow Brook assessment found a moderate susceptibility to contamination for this source of drinking water. The

amount of row crops in the assessment area results in a medium susceptibility to pesticides, and there is reason to believe that land cover data may over estimate the percentage of pasture in the assessment area. No permitted discharges are found in the assessment area. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: mines. Finally, it should be noted that relatively high flow velocities make river drinking water supplies highly sensitive to existing and new sources of microbial contamination.

The State Health Department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, and planning and education programs. A copy of the assessments can be obtained by contacting us, as at the number in the report

**Saratoga County Water Authority**  
**PWSID # NY4530222**  
**SWAP Summary**

A source water assessment was performed on this water source, using available data, to determine the susceptibility to contamination. It is important to note that this assessment was created using available information and only estimates the potential for source water contamination.

Our drinking water is derived from a surface water source, the Hudson River. Hydrologic characteristics generally make rivers highly sensitive to existing and new sources of nitrate, phosphorus and microbial contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this Public Water System (PWS). This PWS provides treatment and regular monitoring to ensure that the water delivered to consumers meets all applicable standards. Continued vigilance in compliance with water quality protection and pollution prevention programs as well as continued monitoring and enforcement will help to continue to protect our source water quality.