# Sussex Water Source of Supply

Sussex draws its potable (drinkable) water from an underground, unconfined aquifer supplied by two deep wells located within the municipality. The pumping stations are capable of a maximum combined flow rate of 5.7 cubic meters/minutes (1,250 Imperial gallons/minute) into the distribution system. Reservoirs with a combined capacity of 5,428,000 litres provide backup supply.

The Town of Sussex chlorinates its potable water at the well heads by means of constant automated chlorination to maintain a safe residual level at all times. The rate of chlorine integration is approximately 0.8mg/L (ppm).

# **Related Links**

For those who wish to explore water and wastewater issues, the following Internet addresses may be helpful:

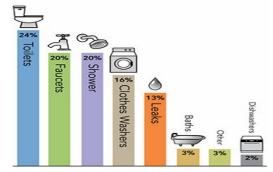
American Water Works Association www.awwa.org

Environment Canada https://www.ec.gc.ca/eau-water/

Water Environment Federation
www.wef.org

# GNB Water Classification Regulation www.gnb.ca

## Did you know?



75% of all water use is in the bathroom! Little changes like taking shorter showers, flushing less often and turning the water off while brushing your teeth have a HUGE impact on our environment.

# Tips to conserve water at home

- When brushing your teeth, turn off the water and use short bursts to clean your brush (this will save 80% of the water normally used!)
- $\partial$  In the laundry room, be sure to match water level with the load size.
- Check your toilet for leaks by placing a few drops of food coloring in the tank. If the water in the bowl changes color without flushing, you have a leak.

Try to do one small thing each day, it will become a habit in no time!

# Water Leaks

A continuous leak through a hole this small wastes **74,000 gallons** of water in just three months!

If you hear noises in pipes in your home or property, that you suspect might be caused by water leakage, give us a call! We will be happy to help determine the cause and remedy.

# 2018 Annual Water Quality **Testing Results**

524 Main Street Sussex, NB E4E 3E4

(506) 432-4540 www.sussex.ca

# WATER QUALITY INORGANIC (CHEMICAL) TESTING RESULTS 2018

GuidelineResultsInorganic Parameters-naturally occurring or synthetic substances containing carbon, hydrogen, nitrogen, and oxygen.Alkalinity-capacity of water to neutralize acidsmg/L-107.331Aluminum-inorganic elementug/L100<51Antimony-element used in metal manufacturingmg/L6<21Arsenic-can be naturally occurring or from industrial effluentsug/L100<11Barium-found in naturally occurring compounds and industrial processesug/L100079.671Boron-naturally occurring in over 80 minerals and within the earth's crustmg/L5<0.1<1Cadmium-present as an impurity in galvanized pipe, also present in solderug/L-44.584Chlarida- natural doment, found in calt used for ico con con44.584	of Detection
Alkalinity-capacity of water to neutralize acids       mg/L       -       107.33       1         Aluminum-inorganic element       ug/L       100       <5       1         Antimony-element used in metal manufacturing       mg/L       6       <2       2         Arsenic-can be naturally occurring or from industrial effluents       ug/L       10       <1       1         Barium-found in naturally occurring compounds and industrial processes       ug/L       1000       79.67       1         Boron-naturally occurring in over 80 minerals and within the earth's crust       mg/L       5       <0.1       1         Cadmium-present as an impurity in galvanized pipe, also present in solder       ug/L       -       44.58       4         Chloride-natural element, found in salt used for ice con-       mg/L       -       46.52       11	<5 <2 <1 67-87
Aluminum-inorganic elementug/L100<5Antimony-element used in metal manufacturingmg/L6<2Arsenic-can be naturally occurring or from industrial effluentsug/L10<1Barium-found in naturally occurring compounds and industrial processesug/L100079.67Boron-naturally occurring in over 80 minerals and within the earth's crustmg/L5<0.1Cadmium-present as an impurity in galvanized pipe, also present in solderug/L-44.584Calcium-related to hardnessmg/L-46.5211	<5 <2 <1 67-87
Antimony-element used in metal manufacturingmg/L6<2Arsenic-can be naturally occurring or from industrial effluentsug/L10<1Barium-found in naturally occurring compounds and industrial processesug/L100079.67Boron-naturally occurring in over 80 minerals and within the earth's crustmg/L5<0.1Cadmium-present as an impurity in galvanized pipe, also present in solderug/L-44.58Calcium-related to hardnessmg/L-16.5211000	<2 <1 67-87
Arsenic-can be naturally occurring or from industrial effluents       ug/L       10       <1	<1 67-87
effluents       ug/L       10       11         Barium-found in naturally occurring compounds and industrial processes       ug/L       1000       79.67         Boron-naturally occurring in over 80 minerals and within the earth's crust       mg/L       5       <0.1         Cadmium-present as an impurity in galvanized pipe, also present in solder       ug/L       5       <0.02         Calcium-related to hardness       mg/L       -       44.58       44.58         Chloride-natural element, found in salt used for ice con- mg/L       mg/L       -       16.52       110	67-87
industrial processes       ug/L       1000       79.07         Boron-naturally occurring in over 80 minerals and within the earth's crust       mg/L       5       <0.1	
the earth's crust     IIIg/L     5     <0.1	<0.1
present in solder     ug/L     5     <0.02	
Chloride-natural element, found in salt used for ice con-	<0.02
Chloride-natural element, found in salt used for ice con- trol and in chemical industry effluents mg/L 250 16.53 1	42-49.7
	5.4-17.8
Chromium-naturally occurring metallic ion ug/L 50 <1	<1
Conductivity-measure of the ability of water to carry electric current - 319.67 3	306-344
Copper-can cause staining in laundry above Health Advisory Limit         ug/L         1000         3.67	<1-9
Fluoride-naturally occurring in minerals and soils         mg/L         1.5         <0.1	<0.1
Iron-natural metallic ion, can cause laundry and plumb- ing fixture stainingug/L300<2	<2
Lead-common element, found in older plumbing installa- tions, also can be present in solderug/L10<1	<1
Magnesium-contributed to water hardnessmg/L-3.97	3.8-4.3
Manganese-natural metallic ion, can cause laundry and plumbing fixture stainingug/L50<2	<2
Mercury-a heavy crystalline salt         ug/L         1         <0.02	<0.02
Nitrate-nitrite-naturally occurring ion, used in inorganic fertilizers         mg/L         -         0.60	0.60
pH-measure of acidity or causticity ug/L 7.0-10.5 7.34 7.	.16-7.50
Potassium-second most abundant element in the earth's mg/L - 0.97	0.9-1.0
Selenium-inorganic element ug/L 10 <2	<2
Sodium-most abundant element in the earth's crust, high concentrations can affect tastemg/L20010.078	3.8-11.2
Sulfate-naturally occurring in numerous minerals.         mg/L         500         25.67	21-34
Thallium-rare natural metallic element         ug/L         -         <1	<1
	121-142
Turbidity-measurement of suspended material in the waterNTU10.160.16	.19-0.18
Uranium-found in certain rare mineralsug/L200.57<	
Zinc-can be found in some plumbing fixtures     ug/L     500     3.67       UNITS = mg/L are parts per million and ug/L are parts per billion	<0.5-0.7

# WATER SAMPLING & TESTING

#### CHEMICAL ANALYSIS (INORGANIC)

Town of Sussex water comes from two municipal wells. As the water travels through the ground, it dissolves naturally occurring minerals.

In order to ensure that Sussex water is safe to drink, a number of chemical analyses are performed each year. The results from the most recent analysis are presented in this report. The Average of Results indicates the average of the **three** locations tested. The Range of Detections indicates the lowest detections to the highest in each parameter.

## ORGANIC ANALYSIS

Two Town wells and a third location are sampled for Clean Water Act parameters twice a year.

# **BACTERIOLOGICAL ANALYSIS**

Ten sites are sampled weekly for bacteriological parameters.

## **CHLORINE ANALYSIS**

Twelve sites are sampled twice weekly for chlorine content. Of these twelve sites, four sites are sampled on each working day. These include the well sites.

UNITS = mg/l are parts per million and ug/l are parts per billion