# **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 www.ec.gc.ca/water

Water Environment Federation www.wef.org

GNB Water Classification Regulation **www.gnb.ca** 

## Did you know?

You can refill a half-litre water bottle 1,740 times with tap water for the same cost as a 99 cent water bottle at a convenience store.



### **Tips for Conserving Water**

Turning off the water while you brush your teeth can save 4 gallons of water a minute. That's 200 gallons a week for a family of four!

Keep a container of drinking water in the fridge, this will prevent you from having to run the water until it gets cold.

When watering your lawn, place an empty tuna can in the area, when the can is full, you can stop watering.

#### **Water Leaks**

An intermittent drip from your faucet or showerhead can waste more than 35,000 litres of water or (35 cubic meters) a year. This amount of wasted water would fill a bathtub 184 times!

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.



524 Main Street Sussex, NB E4E 3E4

(506) 432-4540 www.sussex.ca

### WATER QUALITY INORGANIC (CHEMICAL) TESTING RESULTS 2015

Chemical Parameters		NB Health Advisory Limit	Average of Results	Range of Detection
Inorganic Parameters-naturally occurring or synthetic substances containing of	carbon, hy	drogen, nitrogen	, and oxygen.	
Alkalinity-capacity of water to neutralize acids	mg/l		106	104-108
Aluminum-inorganic element	mg/l		<0.025	<0.025
Antimony-element used in metal manufacturing	ug/l	6	<1	<1
Arsenic-can be naturally occurring or from industrial effluents	ug/l	10	<1.5	<1.5
Barium-found in naturally occurring compounds and industrial processes	mg/l	1	0.084	0.069-0.092
<b>Boron-</b> naturally occurring in over 80 minerals and within the earth's crust	mg/l	5	0.053	0.049-0.057
Cadmium-present as an impurity in galvanized pipe, also present in solder	ug/l	5	<0.5	<0.5
Calcium-related to hardness	mg/l		48.0	45.7-52.6
<b>Chloride-</b> natural element, found in salt used for ice control and in chemical industry effluents	mg/l		13.8	13.5-14.1
Chromium-naturally occurring metallic ion	mg/l	0.050	< 0.010	<0.010
Conductivity-measure of the ability of water to carry electric current	uS/crr		311	301-329
Copper-can cause staining in laundry above Health Advisory Limit	mg/l		<0.012	<0.010-<0.016
Fluoride-naturally occurring in minerals and soils	mg/l	1.5	<0.100	<0.100
Iron-natural metallic ion, can cause laundry and plumbing fixture staining	mg/l		<0.010	<0.010
<b>Lead-</b> common element, found in older plumbing installations, also can be present in solder	ug/l	10	<1.0	<1.0
Magnesium-contributed to water hardness	mg/l		4.13	3.97-4.44
Manganese-natural metallic ion, can cause laundry and plumbing fixture staining	mg/l		<0.005	<0.005
Mercury-a heavy crystalline salt	ug/l	1	<0.05	<0.05
Nitrate-naturally occurring ion, used in inorganic fertilizers	mg/l	10	1.09	0.93-1.4
Nitrate-nitrite-naturally occurring ion, used in inorganic fertilizers	mg/l		1.1	0.93-1.4
Nitrite-naturally occurring ion, used in food preservatives	mg/l	1	<0.05	<0.05
pH-measure of acidity or causticity			7.78	7.72-7.85
Potassium-second most abundant element in the earth's crust	mg/l		0.9	0.8-0.9
Selenium-inorganic element	ug/l	10	<1.5	<1.5
<b>Sodium-</b> most abundant element in the earth's crust, high concentrations can affect taste	mg/l		10.77	10.3-11.2
Sulfate-naturally occurring in numerous minerals.	mg/l		21.3	18.6-26.5
Thallium-rare natural metallic element	ug/l		<1.0	<1.0
Total Hardness-caused by dissolved natural salts	mg/l		137	130-150
Turbidity-measurement of suspended material in the water	NTU	1	<0.2	<0.2
Uranium-found in certain rare minerals	ug/l	20	0.7	0.6-1.0
Zinc-can be found in some plumbing fixtures	mg/l		<0.006	<0.005-<0.008

#### UNITS = mg/l are parts per million and ug/l are parts per billion ND = Not Detected

#### 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.