ANNUAL WATER QUALITY REPORT

THORNHILL CONDOS WATER SYSTEM STRATHAM, NH

PWS ID #: 2232020

Test Results 2020

EPPING WELL & PUMP CO. INC.

As your public water system operators, our mission is to deliver the best-quality drinking water and reliable service in the most economical manner. We hope you will take an active role in keeping your water clean and safe to drink. Some of the ways you can do this are by: minimizing chemical use (use natural cleaners such as baking soda, etc.), ensuring you dispose of hazardous materials such as paint, motor oil, and pharmaceuticals properly, reducing your water usage, keeping runoff to a minimum (sweep your driveway instead of hosing down, use a bucket instead of a hose to wash your car, etc.), and by picking up after your pet. All of these actions will help to lessen the chance of harmful chemicals and contaminants from getting into your water system. We appreciate your efforts to help us keep your water supply clean and safe!

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters and compares them to their respective standards known as Maximum Contaminant Levels (MCLs). **This CCR details all detected water quality results as recent as December 2020 and 5 years prior**.

The source:

The sources of 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 activity.

Contaminants that may be present in source water include:

- **Microbiological contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

What is the source of my drinking water?

Thornhill Condo's PWS draws water from two simultaneously operating bedrock wells (BRW), #1 and #3. A third well, BRW#2, exists but is abandoned. Bedrock well #1 is 500 feet deep and was noted as yielding 30 gallons per minute (gpm) water. Bedrock well #3 is 585 feet deep and yields 19gpm water. Water flows from the wells via submersible pumps to two 10,000-gallon interconnected atmospheric storage tanks. It is transferred via two 5 HP booster pumps to a 3,300-gallon hydropneumatic (pressurized) storage tank. The water is treated with sodium hypochlorite injection (bleach) for disinfection and a single arsenic removal filter.
There are 70 residential units serving approximately 175 individuals. Services are not metered.

Why are contaminants in my water?

Drinking water, including bottled water, may reasonably be 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 at the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791 or by going to https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline

Do I need to take special precautions?

Some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Source Water Assessment Summary

The DES Drinking Water Source Assessment Program (DWSAP) oversees the protection of groundwater and sources of public drinking water. Between 2000 and 2003 DES prepared source assessment reports for all public water systems. The reports identify vulnerabilities and potential contamination threats to drinking water supplies. All readily identifiable land uses within the area that contribute water to your well(s) were taken into account and assigned a rating (or susceptibility factor) as a high (H), medium (M) or low (L) risk to your water supply. The results of your **04/07/2000** assessment for each water supply source are as follows:

- Thornhill Condos' source bedrock well #1 received two high susceptibility rating, one medium susceptibility rating, and nine low susceptibility ratings.
- Thornhill Condos' source bedrock well #3 received two high susceptibility rating, one medium susceptibility rating, and nine low susceptibility ratings.

NOTE: **This data is 21 years old** and includes information current at the time the report was completed. Some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

The Assessment Report is available for review at: https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/stratham.pdf

For more information contact please call Steve Miller at 603-868-1262 or email Steve@maguiremanagement.com or to view the full report, visit the DES Drinking Water Source Assessment website at https://www.des.nh.gov/climate-and-sustainability/conservation-mitigation-and-restoration/source-water-protection/assessment

How can I get involved?

For more information about your drinking water, or to addend a quarterly board meeting please call Steve Miller at 603-868-1262 or email Steve@maguiremanagement.com, or check the website at www.thornhillcondoassociation.com or visit NH Department of Environmental Services Drinking Water and Groundwater Bureau at: https://www.des.nh.gov/water/drinking-water

Definitions

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

Maximum Contaminant Level or **MCL**: 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 or **MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Treatment Technique or **TT:** A required process intended to reduce the level of a contaminant in drinking water.

Abbreviations

BDL: Below Detection Limit
mg/L: milligrams per Liter
NA: Not Applicable
ND: Not Detectable at testing limits
NTU: Nephelometric Turbidity Unit
pCi/L: picoCurie per Liter
ppb: parts per billion
ppm: parts per million
RAA: Running Annual Average
TTHM: Total Trihalomethanes
UCMR: Unregulated Contaminant Monitoring Rule
ug/L: micrograms per Liter

Drinking Water Contaminants:

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. This water system is responsible for high quality drinking water, but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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 https://www.epa.gov/ground-water-and-drinking-water

When and what is my water tested for?

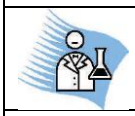
The drinking water testing frequency for your water system is set forth by EPA. The bacteria and chemical monitoring schedules for your water system are available online through the NH DES OneStop database at: http://www4.des.state.nh.us/DWGBSamplingForms/FormsMenu.aspx?PWSID=2232020.

Once there, click on “Master Sampling Schedule MSS”.

DETECTED WATER QUALITY RESULTS (only detected results within the past 5 years are shown)

Radioactive Contaminants – (RAD):
NO VIOLATION. No contaminant exceeded the MCL.
Sample Site(s): Distribution Entry Point (DEP)

Contaminant (Units)	Level Detected	MCL / MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Uranium, mass (ug/L)	1.8 (2017)	30 / 0	NO	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
Combined Radium 226 + 228 (pCi/L	226 – .4, 1.4, 1.2, 3.1 and 228 – .6,1.3, .9, .7, RAA = 1.525 + .875 = 2.4 (2020)	5 / 0	NO	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Compliance Gross Alpha (pCi/L)	6.4 (2017)	15 / 0	NO	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.



Inorganic Contaminants - (IOC):
NO VIOLATION. No contaminant exceeded the MCL.
Sample Site(s): Distribution Entry Point – DEP; except where noted

Contaminant (Units)	Level Detected	MCL / MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Arsenic (ppb)	1, 7, 6, 9, 12 RAA = 7 (2020)	10 / 0	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. (RAA equals MCL, not above MCL. NO Violation.)
Chlorine (ppm)	Range: 0.17 (Nov) - 0.33 (May) (2020)	4 / 4 (MRDL / MRDLG)	NO	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort. (Free residual chlorine levels were field tested at the bacteria sample site.)
Barium (ppm)	0.004 (2018)	2 /2	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Chromium (ppb)	1.7 (2018)	100 / 100	NO	Discharge from steel and pulp mills; erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Copper (ppm) 90th Percentile	0.067 (2018)	AL / MCLG = 1.3 / 1.3 (NO Violation)	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor

Lead (ppb) 90th Percentile	4 (2018)	AL / MCLG = 15 / 0	NO	Corrosion of household plumbing systems, erosion of natural deposits	Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Synthetic Organic Contaminants (SOC):
including Pesticides and Herbicides
NO VIOLATION. No contaminant exceeded the MCL.
Sample Site(s): Distribution Entry Point (DEP)

Volatile Organic Contaminants (VOC):
NO VIOLATION. No contaminant exceeded the MCL.
Sample Site(s): Distribution Entry Point (DEP); except where noted
TTHM/HAA5 (subset of VOC)

Additional Testing

Additional Tests & Secondary MCLs (SMCL)	Results	Date	Treatment technique (if any)	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Sodium (ppm)	29.3 (2018)	2017		100-250	We are required to regularly sample for sodium

Other Information

Coliform bacteria are naturally present in the environment and they are not harmful to human health. We use coliform bacteria as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. If your water systems' water sample(s) tested positive for coliform bacteria this triggers the need to look for potential problems in the source wells, water treatment or distribution. When this occurs, we are required to conduct the following types of assessments to identify problems and to correct any problems found.

Level I Assessment: A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system (conducted after first positive coliform sample).

Level II Assessment: A very detailed study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system (conducted after two or more positive coliform samples in 12 months, or an e. coli detection).

Assessments

During the past year, we were required to conduct Assessment(s)	Number of Assessments required in the reporting year	Number of Assessments completed in the reporting year	Number of Corrective Actions Required	Number of Corrective Actions Completed	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
Level 1	**0**				
Level 2	**0**				

We appreciate all you do to help keep water clean and to protect this precious resource.