

DATE: May 7 2024 PHONE: 613-484-8773

CONTACT PERSON: Cathy Gordon

LOT# \_\_\_\_\_ CONC# \_\_\_\_\_ PLAN# \_\_\_\_\_

TWP: \_\_\_\_\_ COUNTY: \_\_\_\_\_

STREET: 1717 Bay rd TOWN/CITY: Kingston

OWNER: \_\_\_\_\_ BUYER: \_\_\_\_\_

TEST PUMP RECORD			EQUIPMENT EVALUATION			
TIME:	Water Pressure	Flow Rate	Pump:	Tank:	Well Head:	Pipe/Electrical:
0 Min:	<u>between 40-60</u>	<u>5 Gpm</u>	<u>G</u>	<u>F</u>	<u>P</u>	<u>P</u>
			Key: (G) Good; (F) Fair; (P) Poor; (N) Needs Attention			
1: <u>300 TDS</u>			Hardness:	TDS:	Iron:	Sulphur: <u>-</u>
2:			<u>20</u>	<u>320 TDS</u>	<u>0.5</u>	pH: <u>7</u>
3:			Hardness:	TDS:	Iron:	Sulphur: <u>-</u>
4: <u>320 TDS</u>			<u>20</u>	<u>320</u>	<u>&lt;0.5</u>	pH: <u>7</u>
5:						
6:						
8:						
10: <u>320 TDS</u>						
12:						
15:						
20:	<u>0 PSI Dry</u>					
25:						
30:	<u>Pump off</u>					
40:	<u>Pump ON</u>	<u>0.125 Gpm</u>				
50:	<u>Pump off</u>					
60:	<u>Pump ON</u>	<u>0.125 Gpm</u>				
WELL STATS TODAY						
Flow Rate (gpm):	<u>0.125 Gpm</u>					

NOTES:  
After having the pump off for 10 min. It will fill my bucket (5 gallons) 3". If you do the math it comes out to 0.125 Gpm.  
Well is located in garage floor with a well seal.  
 $\frac{1}{2}$  115v 3 wire pump.

**WELL EVALUATION**

**BURIED WELL HEAD**

To Whom it May Concern:

As the well head is buried, the type of well, the well depth, static levels or well condition are unknown. From the test pumping results of this water well we have determined a rate of Varied gpm for 1 hour. Due to the well being a buried well head, we are unable to measure the static water levels to achieve an exact reading. From this information, we believe the well can produce 0.125 gpm on May 7. Today, we pumped 102.5 gallons of water from this well.

NOTE: The average person uses 60-70 gallons of water in a 24 hour period.

Assessment done by: Brett Byron Signed: Brett Byron

Today, I completed a water inspection at 1717 Bay rd. Please find a checkmark beside the recommendations that are relevant to your water.

If you have any questions, please do not hesitate to call 613-634-4346.  
Thank you for choosing Jeff Byron Pumps & Water Treatment!

Brett Byron

Water Treatment Specialist  
Licensed Well Technician



### Water Softener

Your water exceeded the standard hardness level. This is a common occurrence, but it does mean that the calcium and magnesium in the water may build up on your fixtures, leave spots on your dishes, decrease the effectiveness of soaps. It can also build up in water heaters shortening their lifespan. A water softener will remove the hardness. **Customer would like water softener quote.**

- Soft: 0 - 1
- Slightly hard: 1 - 3.5
- Moderately hard: 3.5 - 7
- Hard: 7 - 10.5
- ✓ Very hard: 10.5 or more



### Ultraviolet Disinfection (UV)

Your water system lacks a method of disinfection. All water sources are vulnerable to bacteria contamination which can cause illness. Without testing it is impossible to know if your water contains bacteria therefore, we recommend UV disinfection to ensure safe water on all water supply systems. We strongly recommend that all water systems have an UV light for bacteria protection. Please note, if total hardness exceeds 7 gpg, the water should be softened. If your water chemistry contains levels in excess of those mentioned below, proper pre-treatment is recommended. Proper pre-treatment is essential for the UV disinfection system to operate as intended. **Customer would like UV quote.**

- Iron: <0.3 ppm
- Hardness: <7.0 gpg
- Tannins: <0.1 ppm

### Hydrogen Sulfide Treatment

Your water exceeded the sulphur aesthetic objective of 0.03 mg/L as odour was detected. The intensity of the rotten egg smell varies from well to well. The effects of sulphur can range from annoying to destructive. It can stain your clothes and fixtures. At higher levels can plug your water system, and even corrode your piping and equipment. We have a few excellent options to deal with Hydrogen Sulfide. Please let us know if you like more information or a quote. **Customer would like sulphur treatment quote.**

### Iron Removal

Your water exceeds the recommended level of 0.3 mg/L. Depending on the level of iron, your laundry and fixtures may be stained. Iron makes it difficult to eliminate bacteria as it can coat the UV's glass sleeve blocking the ability of the UV light to destroy the bacteria. At high levels. Iron can also reduce your water pressure as it can you're your water pipes and equipment. Please let us know if you would like more information. *Customer would like iron removal system quote.*

### Reverse Osmosis (RO)

We recommend RO systems if you have any concerns about contaminates in you drinking water. Studies have shown that there are increasing contaminates in our water sources. A residential RO produces purified water at your kitchen sink. There would be an extra tap at your sink for drinking water/juices/coffee etc. It removes contaminates such as sodium, lead, nitrates, and several other chemicals. This is an inexpensive way of protecting yourself from that. *Customer would like RO quote.*

### Whole Home Reverse Osmosis

We found your water to test at      TDS. We recommend further testing as our portable TDS meters are accurate to 1000 mg/l. Over this level, we recommend further analysis at a certified lab to confirm whether you need our custom designed salt system.

The following is an excerpt from a Health Canada document about Total Dissolved Solids (TDS):

"The presence of dissolved solids in water may affect its taste.<sup>(33-42)</sup> The palatability of drinking water has been rated, by panels of tasters, according to TDS level as follows: excellent, less than 300 mg/L; good, between 300 and 600 mg/L; fair, between 600 and 900 mg/L; poor, between 900 and 1200 mg/L; and unacceptable, greater than 1200 mg/L.<sup>(37)</sup> Water with extremely low TDS concentrations may also be unacceptable because of its flat, insipid taste.

In addition to palatability, certain components of TDS such as chlorides, sulphates, magnesium, calcium and carbonates also affect corrosion or encrustation in water distribution systems.<sup>(21)</sup> High TDS levels (above 500 mg/L) result in excessive scaling in water pipes, water heaters, boilers and household appliances such as tea kettles and steam irons.<sup>(43)</sup> Such scaling can shorten the service life of these appliances."<sup>(44)</sup>

<http://health.canada.ca/publications/healthy-living-vie-saine/water-dissolved-solids-matieres-dissoutes-eau/alt/water-dissolved-solids-matieres-dissoutes-eau-eng.pdf>

*Customer would like whole home RO quote.*

### Galvanized Fittings

We found your water system to have some corroded galvanized fittings that could let go and cause flooding. We recommend replacing with brass or all stainless. Our understanding is some insurance companies will not cover floods if galvanized is the cause. *Customer would like quote to replace fittings.*

### Pressure Tank

We found your pressure tank to be in poor condition due to:

- Needing air
- Corrosion
- Non-bladder style
- Expired bladder
- Slow water leak
- 

*Customer would like pressure tank quote.*



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**Water Equipment Wiring**  
The wiring on your water system does not meet the electrical code. We recommend upgrading this electrical work. *Customer would like equipment wiring quote.*

**Well Cap**  
The well cap is not a vermin proof cap as required in order to meet code. Small insects, spiders and earwigs can get into your water. *Customer would like well cap quote.*

**Well Casing**  
The well casing is not extended above the ground or does not meet the minimum height requirements as per Ministry of the Environment regulations. *Customer would like quote.*

**pH** is a parameter that indicates the acidity of a water sample. The operational guideline recommended in drinking water is to maintain a pH between 6.5 and 8.5. The principal objective in controlling pH is to produce a water that is neither corrosive nor produces incrustation. At pH levels above 8.5, mineral incrustations and bitter tastes can occur. Corrosion is commonly associated with pH levels below 6.5 and elevated levels of certain undesirable chemical parameters may result from corrosion of specific types of pipe. 8.5, there is also a progressive decrease in the efficiency of chlorine disinfection and alum coagulation. *Customer would like quote.*

**Tannins** are a natural organic material that can be the by-products of nature's fermentation process, be created as water passes through peaty soil and decaying vegetation. This can cause water to have a faint yellow to tea-like color, Tannins may give a tangy or tart aftertaste to water. They may also cause water to have a musty or earthy odor. While they may make water unappealing to drink and stain laundry, they present no health hazard. They can impact an ultra-violet system's ability to protect you from bacteria and viruses. *Customer would like quote.*

**Other Recommendations**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Customer was onsite and the findings were explained.