



WELL INSPECTION

113 Wilson Ave Ext
Swannanoa, NC 28778

Summer Covington

MARCH 8, 2023



Inspector

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TABLE OF CONTENTS

1: Inspection Information	4
2: System Information	5
3: Well (Standard)	6
4: Well Data	10
5: Pump (s)	11
6: Pressure System	13
7: Cistern	14
8: Additional Components	15
9: Well Test	17
10: Reference	18

SUMMARY



ITEMS INSPECTED



NEEDS REPAIR

- ⊖ 3.2.1 Well (Standard) - Well Insulation: There may not be enough insulation.
- ⊖ 3.6.1 Well (Standard) - Access Port: There is no access port cover.
- ⊖ 3.7.1 Well (Standard) - Wire Hole: Wire hole needs to be sealed.
- ⊖ 5.1.1 Pump (s) - Main Pump: Appears to be no power at time of inspection

1: INSPECTION INFORMATION

Information

Please contact our office if you have any questions about this report or the system.

We can be reached at
828.552.5174 or lab@wncil.com

Client Name

Summer Covington

Client Relationship to Property

Buyer

Weather Conditions During Inspection

Sunny

Ground Conditions During Inspection

Average

In Attendance

WNCIL, Seller's Real Estate Agent,
Buyer

Property Info Sources

MLS Sheet available at time of inspection, Property Card available at time of inspection

Status Of Property

Vacant, Per Observation

Inspection

Drinking well water systems are subterranean; therefore, it is impossible to determine their overall condition without pulling the pump and a camera inspection. Also, when no water is being used (i.e., when the house is vacant) a determination as to their status is difficult.

No prediction can be made as to if or when a part of the system may fail. This inspection report comments on the workability of the system on the day of the inspection and is in no way intended to be a warranty. Workability can be altered by factors such as excessive use, faulty plumbing, neglect, environmental influences, and physical damage to the system.

Every system is a little different and will have different components. Our report is based on current well installation practices. Older wells may be a little different and "grandfathered" in.

Maintenance

All drinking well water systems require regular maintenance. This includes fixing household leaks, having the system inspected every few years, emptying/replacing filters, and water tests every 1-3 years.

Reference Section

There is a "Reference" section at the end of this report that has explanations about what various components are and what they do. We hope this will be helpful to consumers who may not know much about well systems.

Every system is a little different and depends on the age of the system, but the Reference section, as with the rest of the report, is based on current code.

Each "needs action" item will also have some explanation as well.

NC Certified Well Contractor

Any NC Certified Well Contractor can do any recommended repairs.

WNCIL is a NC Certified Well Contractor and can provide an estimate for any recommended repairs upon request.

2: SYSTEM INFORMATION

Information

Well Permit Well Permit not available at time of inspection	Water Source Drilled Well	Water Source Inspected? Inspected
How many properties are served by water source Appears 1	Shut Offs for Shared/Community Wells N/A	
Water Source Ownership Appears Private WNCIL cannot determine water source ownership. We can only go off what we see or what is provided by property owner (including deeds, maintenance agreements, mls sheet, etc). Please consult with a real estate attorney for more information.		
Where is water source located? Appears to be on subject property WNCIL is not a surveyor and therefore cannot identify parcel layouts and so cannot guarantee which parcel a well is on. Recommend consulting a real estate attorney or a NC Surveyor.		
General Info: Shared/Community Wells If this is a shared or community system, you may want to find out if there is a maintenance agreement in place and talk to your agent or a real estate attorney about the pros and cons of such an agreement. If there is an HOA, usually they handle the maintenance of a shared or community system.		
General Info: Well on another property If the well is on another property, you may also want to find out if the inspected property has water rights and/or an easement via a deed. Your agent or real estate attorney should be able to help you research this and explain the details of this.		

3: WELL (STANDARD)

Information

Well Location

To the left of the driveway

**Well Housing: Well Housing Type**

Well Rock

**Well Insulation: Type of Insulation**

Well rock insulated

**Well Casing: Casing**

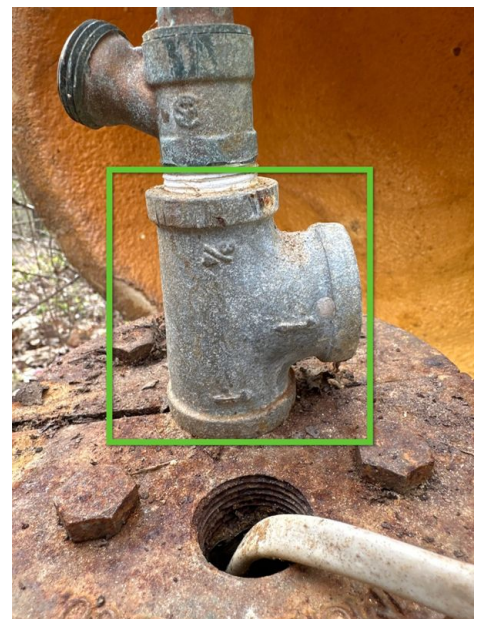
PVC

**Well Casing: Casing Height**

Greater than 12 Inches

**Well Head: Well head**

Appears to be metal



Well Seal: Well Seal Material

Appears to be metal

**Well Seal: Well Seal Diameter**

Appears to be 6 1/4in

Access Port: Access Port Status

No cover

**Wire Hole: Wire Hole Status**

Not Sealed

**Needs attention**

3.2.1 Well Insulation

THERE MAY NOT BE ENOUGH INSULATION.

Recommend adding additional insulation or closely observing to make sure current insulation is adequate.



Needs Repair



3.6.1 Access Port

THERE IS NO ACCESS PORT COVER.

Access port cover should be installed to help prevent contaminants from getting into the well.



Needs Repair



3.7.1 Wire Hole

WIRE HOLE NEEDS TO BE SEALED.

This is to help prevent contaminants from getting into the well.



Needs Repair



4: WELL DATA

Information

Well Tag Not Located	Well Tag Location N/A	Drilled Date Information unavailable
Driller Information unavailable	Approx diameter of well in inches 6 1/4 in per observation	Well Depth Information unavailable
Casing Depth Information unavailable	Static Water Level per tag Information unavailable	Static Water Level as measured at time of inspection 51.01ft

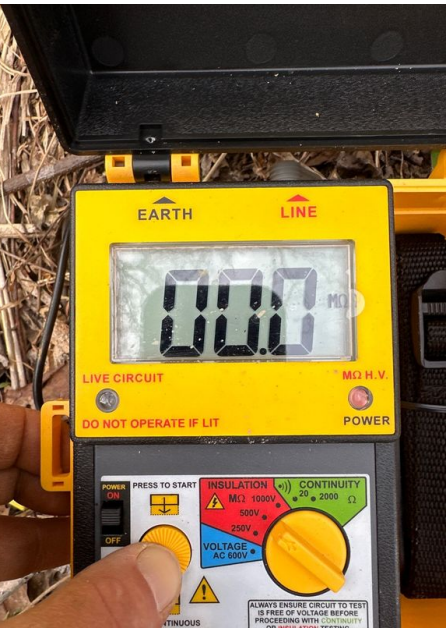


Well Yield per tag Information unavailable
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5: PUMP (S)

Information

Main Pump: Pump(s) Main Pump appears to be a submersible pump (pump is in the well)	Main Pump: Main Pump Tested? Unable to Test - See Notes No power at time of inspection	Main Pump: Location of above ground pump (if applicable) N/A
Main Pump: Pump Tag Pump Tag (or other info) not located	Main Pump: Pump Tag (or information) Location Information unavailable	Main Pump: Install Date Information unavailable
Main Pump: Brand of Pump Information unavailable	Main Pump: Depth pump is set at Information unavailable	Main Pump: Approx Pump Horsepower Information unavailable
Main Pump: Pump Amperage Information unavailable	Main Pump: Pump Voltage Information unavailable	Main Pump: GPM of Pump Information unavailable
Main Pump: Wire Size/Type to Pump #12 AWG		
Main Pump: Wire 1 to Ground 0 Ideally, the reading should be "infinity"; so a reading closer to zero means the wire and/or pump motor is not operating at 100%		



Main Pump: Wire 1 to Wire 2

0

Ideally, the reading should be "infinity"; so a reading closer to zero means the wire and/or pump motor is not operating at 100%



Main Pump: Wire 2 to Ground

0

Ideally, the reading should be "infinity"; so a reading closer to zero means the wire and/or pump motor is not operating at 100%



Needs attention

5.1.1 Main Pump

APPEARS TO BE NO POWER AT TIME OF INSPECTION

 Needs Repair

6: PRESSURE SYSTEM

Information

Pressure System	Pressure System location	Pipe coming in - Material and Size
No Pressure System Located	N/A	N/A
Pipe coming out - Material and Size		
N/A		

Limitations

Pressure System Overview

PRESSURE SYSTEM WAS NOT LOCATED.

Appears to be an empty lot with no pressure system

7: CISTERN

Information

Cistern Notes & Pictures None located	Location of Cistern None located	Additional Notes None
Cistern? None Located	Cistern Inspected? None Located	

8: ADDITIONAL COMPONENTS

Information

Well Power: Location (& Picture) of Well Power Shut-off Unknown	Well Power: Pump Protector None Located	Filters and Other Treatment Systems: Water Treatment Systems None located
Filters and Other Treatment Systems: Additional Notes None	Shut off Valves, Sample Ports, etc: Shutoff Valves None located at well head	Shut off Valves, Sample Ports, etc: Sample Ports One located at well head
		
Shut off Valves, Sample Ports, etc: Pressure Relief Valve(s) None Found	Shut off Valves, Sample Ports, etc: Check Valve None located	Individual Shut Off Valve: Location None located
Individual Shut Off Valve: Condition N/A	Individual Shut Off Valve: Additional Notes None	

Individual Sample Port: Location

Well Head area



Individual Sample Port: Condition

Other - See Notes
Unable to test due to there being no power

Individual Sample Port:

Additional Notes

None

Individual Pressure Relief Valve:

Location

Appears not to be present

Individual Pressure Relief Valve: Condition

Appears not to be present

Individual Pressure Relief Valve: Additional Notes

None

9: WELL TEST

Information

Well Tests Other - See Notes Test could not be performed due to there being no power	Time it took to run off 100 Gallons Information unavailable	Pressure and Flow for 100 Gallons Information unavailable
Pump Test: Flow Rate (gpm) at time of inspection Information unavailable	Recovery Rate at time of inspection (gpm) Information unavailable	

10: REFERENCE

Information

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Reference Section

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Every system is a little different and depends on the age of the system, but the Reference section, as with the rest of the report, is based on current code.

To protect your pump and well, the following items are recommended:

- Repair any leaking fixtures (sinks, running toilets, hose faucets, etc) promptly
- Limit major water usage (filling pools or hot tubs, car washes, etc)

Regular Inspections

Have your system inspected every 1-3 years to ensure everything is working properly. Catching problems, especially with the pressure system, early can help protect your pump and well.

Treatment Systems

Standard sediment filters should be flushed as needed to help maintain your fixtures and appliances and water pressure.

UV Lights should be replaced every year.

Other treatment systems should be maintained as recommended.

Water Testing

The EPA recommends testing for Total Coliform and E. Coli once every 1 - 2 years and a fuller test every few years.

Bacteria can occur naturally in wells and can build up over time. If a person is using the water on a regular basis, their immune system may adapt, but when someone else uses the water, it can make them sick. This makes regular testing an important regular maintenance item.

Permits

Permits began to be issued in the mid 1970's, so wells that were drilled before then probably don't have a permit.

Additionally, permits can be difficult to find. Depending on the time period and county, they could be filed by property owner, pin, or address at the time it was drilled (which could have changed since then), but it can also be filed by the name of the well driller who did the work (which may not be information anyone remembers). And a few counties have lost some records through fire or flood.

Insulation

The well housing/well should be insulated to prevent the pipes and other components from freezing.

An insulation bag is the recommended insulation for the well as the insulation is covered with a protective plastic layer to help prevent mold, animal nests, etc. But any insulation will work as long as there is enough to keep the well and the pipes from freezing.

The insulation should be checked on a regular basis for dampness/mold, animals (and animal nests & waste), normal wear and tear, etc and replaced as needed.

Well Housing

Well should be housed to protect it from animals and animal waste, weather, dirt, water run off (surface water, gutters, etc), and other possible contaminants.

For a drilled well, a "well rock" or a concrete tube with lid are probably the two most common kinds.

Well Head

The casing is a PVC or steel pipe that should start at least 12 inches above the ground and runs down to the top of the bedrock layer to keep dirt and ground water out of your well. Inside the casing is the pipe that carries the water. This pipe goes down the casing and continues through the bedrock. The pipe usually ends about 10-20 feet above the bottom of the well. The pump is located at the bottom of the pipe. At the top of the casing is the well seal, which holds up the pipe & pump as well as covering the pipe & casing, so things don't get in the well.

Vent Cover

The well seal has a vent hole to allow air to move in as the water is pumped out. There should be a vent cover on this hole to allow air in but keep out most insects, other animals, animal waste, etc.

Wire Hole

The wire hole is a hole in the well seal that allows the electric wire to go down to the pump. This hole should be sealed around the wire to prevent insects, other animals, animal waste, etc from getting into the well. This can be done with a "grommet" or silicone.

Well Data: Well Tag

When a new well is drilled, the well driller is required to put a well tag on the casing with certain information about the well.

Sometimes these are lost: they fall off onto the ground, homeowner removes it and puts it with their records, etc. Even when present, they may not be filled out completely or they may not be legible due to the way they were filled out, age, or the effects of being outside.

Well Data: Static Water Level

Static Water Level is the distance from the ground to the top of the water in the well.

This is often stated on the well tag and can often be measured through the vent hole with a specialized sonar unit.

(The bigger the number, the lower the level is, the less water is in the well: if your well is 100 ft deep and your static water level is 40 ft, it means you have 60 ft of water in your well; if your static water level is 70 ft, it means you have 30 ft of water in your well.)

Well Data: Well Yield

Well yield is the amount of water that the ground produces. This is usually stated on the well tag. If the system is set up correctly and functioning properly, it can be measured during the inspection.

Main Pump

The main pump is what pumps or pulls the water from the bottom of the well to the house and is usually controlled by the pressure system. In a standard drilled well, the main pump is usually submersible. Occasionally, a well will have an above ground pump instead of a submersible one as the main pump, but this is not suitable for most wells.

Pump Maintenance and Repair

Replacing a pump is the most expensive repair a well will need regularly, especially for submersible pumps. Most companies will charge a truck fee, a price per foot to pull the pump up, the cost of the pump itself, and a price per foot to replace - this doesn't include if the pump needs new pipe or wiring.

Pumps will need replaced every few years, but there are steps homeowners can take to help extend the life of the pump: setting it at the proper depth, booster pumps for long distance/up hill, maintaining the pressure system (see that section for more info), installing a pump protector, installing shut off valves so the pump doesn't keep pumping if a line breaks, etc.

Keeping the pressure tank, gauge, and switch in good working order and the proper size and settings is the most important way to preserve the pumps life span as they are what triggers it to come on and off. Repairs to the pressure system are usually quick and relatively inexpensive.

Pump Tag

When a pump is installed, it is common practice to install a "pump tag" with information like who installed it, when, details about the pump, etc. Sometimes they are attached to the well head or casing or loose around it, sometimes they are at or near the pressure system, and sometimes the homeowner files them with their receipts and house papers. Above ground pumps usually have their pump tag and/or manufacturer's label on them. Sometimes instead of a tag, the installer will write the info on another part of the well (usually the pressure tank).

Just like with the well tags, they vary in the amount of information filled out as well as in readability. If there is not a well tag, if the homeowner has the paperwork from the install (like the receipt), there is sometimes information on there, though these are rarely available at the time of inspection.

If the pump tag (or other paperwork) is not available at the time of inspection, there are some items that can be determined and some that cannot

Depth of Submersible Pump

In a standard drilled well, the main pump is usually submersible. The standard placement is about 10-20 ft above the bottom of the well. Some people will put the pump higher to save money on the install, but when the water level drops lower than the pump, it won't pull water even if there is more water in the well. This can cause the pump to run without water in it which will "burn up" the pump".

Pump Gallons Per Minute (GPM)

GPM of pump is how much water the pump can move.

This is often recorded on pump tag. If system is functioning properly, this can be measured at time of inspection.

Why the pressure system is important.

Keeping the pressure tank, gauge, and switch in good working order and the proper size and settings is the most important way to preserve the pumps life span as they are what triggers it to come on and off. Repairs to the pressure system are usually quick and relatively inexpensive.

Pressure Tank

The water enters the pressure tank which uses a bladder inside the tank to maintain water pressure when the pump is off. Sometimes the pressure tank has the draw down marked on it, which is how many gallons of water can be used before the pump cuts on.

Filters and Other Water Treatment Systems

Water Filters, UV Light, Softeners, etc., are usually placed after the pressure tank and should have a shut off valve before and after the device. These systems require regular maintenance and service.

Standard Sediment Filters need to be flushed or have the media cleaned/replaced on a regular basis. How often this needs done depends on the type of filter, the system, and the amount of use. A new property owner should probably check it once a month until they are familiar with the system.

UV Light bulbs should be checked and replaced yearly.

If a softener system or other treatment system is found, a buyer should ask the seller for more information and service records.

Shut Off Valves

Every well should have at least one shut off valve. The most common place is between the pressure tank and the house.

It is highly recommended that there be a shut off valve at the well head on each line running from the well head to a building, so that the water can be shut off to each line individually if one has a break between the well and the building. For shared wells, some lenders will require that there be a shut off on each line out of the well.

The most common place to find a shut off valve is near the pressure system, usually between it and the house so that if a pipe breaks under or in the house, the water can be shut off. Some people also put one before the pressure system so the water can be shut off to work on the pressure system.

Sample Port

The Sample Port is sometimes called a boiler drain, and it looks like a hose hookup but by code it should not have threads. It is used to collect water samples and run certain well tests. It can be located on the well head and/or near the pressure tank. Caution should be used before attaching a garden hose to this, as it is not always installed as securely as a typical hose spigot.

Pressure Relief Valve

Having a pressure relief valve is highly recommended. If the pressure switch malfunctions and water pressure continues to build, it lets the water out to avoid breaking pipes, pressure tanks, etc., which could cause damage to the house and well system. Pressure relief valves should be located in an area where water spillage would not cause significant property damage. This is usually installed at the pressure system.

Check Valve

The check valve prevents water from back flowing through the system. Every well should have at least one check valve, but they can be placed on the well head, before the pressure tank, between the pressure tank and the house, or all of the above and cannot always be located. Check valves are required by current code.

Flow Test (Pump Test)

The Flow Test measures the flow coming from the well and the pump into the house.