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KEEPING NORTH CAROLINA'S ENVIRONMENT CLEAN
"ONE TANK AT A TIME!"

INSPECTION REPORT:

PROPERTY ADDRESS: 757 Atkins Road

Fuquay Varina, NC 27526

DATE OF INSPECTION: November 17, 2022

NORTH CAROLINA SEPTIC INSPECTIONS

VENICE "DAN" PINER

NCOWCICB Certification #: 3434I

Grade IV Septic Tank Contractor / Installer

KEVIN HOSKINS, Certified Inspector

NCOWCICB Certification #: 5712I

PHONE: 919-880-1590

EMAIL:

dan@ncsepticinspections.com

A. CONTACT INFORMATION

Inspection requested by: Tania Canales (Broker/Realtor)
Insight Group

Phone: 984-269-9634 E-mail: taniacanalesrealetatenc@gmail.com

Current Owner: *Owner of Record*
Site Address: *757 Atkins Road, Fuquay Varina, NC 27526*

Operator in Responsible Charge: **(ORC):**	☐ Required	☒ Not Required
Current contract expiration date:	☒ N/A	
Required O&M service frequency:	☒ N/A	
Date of last service:	☒ N/A	

B. SYSTEM INSPECTION

Inspection Performed on: Date: *November 17, 2022* Time: *11:00 AM* To *1:30 PM*

Estimated Design Flow: ☒ 360 Gal/Per/Day (Consistent for 3 Bedrooms)

Indicate Source of Design Flow:

☒ Permit from Wake County was available at time of inspection.

Design Flow based on Permit: (See Attached Permit)

Number of Permitted Bedrooms: (Could not Confirm)
Designed Flow Based on Permit: (Could not Confirm)

Design Flow Based on Real Estate Listing:

Number of bedrooms per real estate listing: ☒ 3 Bedrooms
Design flow per real estate listing: ☒ 360 Gal/Per/Day
☒ MLS ☒ Realtor.com ☐ Zillow

Present Estimated Daily Flow:

Is Home Occupied?	☒ Yes (Home Appears Occupied)
Daily Flow?	☒ Could not Confirm
Slow Drip?	☒ No

SUMMARY INSPECTION REPORT:

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At the conclusion of the Septic Tank Inspection and the Wastewater Evaluation, it was determined that the on-site wastewater system appeared to be functioning, however, the following items are recommended for your consideration. Additional information pertaining to the operation of this system to include a suggested improvement item is also included below. This summary is not the entire report. The complete report may include additional information of interest or concerns to you. It is strongly recommended that you read the complete report. Warning…The following pictures may also be considered graphic in nature.

Suggested Maintenance Items:

1). The combined depth of surface scum, mixed solids, and sludge does not equal the 25 to 30 percent of the liquid holding capacity necessary for pumping, however, because of the non-biodegradable materials, in addition to the thickness of primary chamber surface scum, consideration should be given to pumping the tank at this time. FYI: To prevent a backup of sewage resulting in an interruption in service, periodic removal, and cleaning of effluent strainer is also recommended (see page 9 for additional information and pictures).

2). To prevent the infiltration of moisture and insects, it is recommended that Service Provide reseal around the effluent pump and highwater alarm float wires located in pump tank riser well (see page 10 for additional information and pictures).

3). Electrical contacts in pump tank control panel box have rust and corrosion. To prevent possible electrical short, cleaning the terminals is recommended (see page 11 for additional information and pictures).

Suggested Improvement Items:

4). Pump tank Electrical control panel box should be a minimum of 12 inches above grade. In extreme rain events water possibly could reach levels of infiltration around base of box. FYI: The lesser height is not unusual when landscaping and backfill have been added around the tanks (see page 12 for additional information and pictures).

SYSTEM INSPECTION REPORT:

On-site Wastewater Inspection

Feet from Foundation: *NC Code (No Less than 5 Feet)*	☒ 5 Feet 6 Inches		
Is Foundation of home an encroachment?	☒ No		
Feet from Deck? *NC Code (No Less than 3 Feet*	☒ 22 Feet		
Is Driveway an encroachment?	☐ Yes	☒ No	☐ Non-applicable
Feet from well if applicable: *NC Code (No Less than 50 feet)*	☒ Non-applicable		
Community water or county water?	☒ Yes	☐ No	☐ Non-applicable
Feet from main water line if applicable: *NC Code (No Less than 10 Feet)*	☒ 10 Plus Feet ☐ Less Than 10 Feet		☐ Non-applicable
Is there and irrigation system?	☐ Yes	☐ No	☒ Could not Confirm
Distance tank is located from property line: *NC Code (No Less than 10 Feet)*	☒ 10 Plus Feet ☐ Less Than 10 Feet		☐ Non-applicable
Were property lines flagged?	☐ Yes	☒ No	☐ Could not Confirm
Average depth of tank below finished grade?	☒ 4 to 6 Inches		☐ Non-applicable
Were Risers present?	☒ No (Risers are not Required or Necessary)		
Type of Riser (material used)?	☒ Non-applicable		
Condition of inlet riser lid?	☒ Non-applicable		
Condition of inlet riser base?	☒ Non-applicable		
Condition of outlet riser lid?	☒ Non-applicable		
Condition of outlet riser base?	☒ Non-applicable		
Condition of inlet access tank lid?	☒ Age-related Chips (Acceptable at this time)		
Condition of inlet access lid handle?	☒ Plastic Handle (OK)		
Condition of outlet access tank lid?	☒ Age-related Chips (Acceptable at this time)		
Condition of outlet access lid handle?	☒ Plastic Handle (OK)		
Condition of center baffle wall lid?	☒ Non-applicable		
Condition of baffle wall handle?	☒ Non-applicable		
Condition of baffle wall?	☒ OK		
Were stress cracks present?	☒ No (None were Present)		
Does tank have an outlet baffle tee?	☒ Yes		
If baffle tee is present, what type of tee?	☒ PVC		
Condition of outlet baffle tee? (PVC)	☒ OK (Functional)		
Should existing tee be replaced with pvc tee?	☒ PVC Tee is Present		
Should effluent strainer/filter be installed?	☒ Effluent Strainer/Filter is Present		
Condition of filter/strainer if present?	☒ OK		
Are roots present in tank?	☒ Grass Roots Only		
Does tank appear to be watertight?	☒ Yes		
Water level in tank relative to tank outlet?	☒ Slightly Elevated Above Invert of Outlet		
Single chamber tank with no baffle wall?	☒ No (Existing Tank is Double Chamber Tank)		

SYSTEM INSPECTION REPORT:

Is leakage suspected?	☒ No
Is concrete etching present at static water line?	☒ Yes (Normal Age-related)
Is interior corrosion present?	☒ Normal Age-related Corrosion Present
Evidence of multiple inlet wastewater pipe connections?	☒ None Were Visible
Inlet wastewater supply pipe visible?	☒ Yes
Outlet wastewater supply pipe visible?	☒ Yes
Inlet primary chamber floating scum measurement?	☒ 6 to 7 Inches
Inlet primary chamber bottom sludge measurement?	☒ 6 to 8 Inches
Outlet secondary chamber floating scum measurement?	☒ 1/2 to 1 Inch
Outlet secondary chamber bottom sludge measurement?	☒ 3 to 5 Inches
Date tank was last pumped (if known)?	☒ Unknown
Should tank be pumped at this time?	☒ Yes (Both Chambers)
If single chamber tank, average sludge, and scum depth?	☒ Non-Applicable

Does system have a pump tank? ☒ Yes (Complete Report Below) ☐ No

PUMP TANK SYSTEM INSPECTION REPORT:

Feet from foundation: *NC Code (No Less than 5 Feet)*	☒ 12 Feet 6 Inches+ -		
Is foundation of home an encroachment?	☒ No		
Feet from Deck? *(No Less than 3 Feet)*	☒ 25 Feet + -		
Is Driveway an encroachment?	☐ Yes	☒ No	☐ Non-applicable
Feet from well if applicable: *NC Code (No Less than 50 feet)*	☒ Non-applicable		
Feet from Septic tank?	☒ 4 Feet (Plus)		☐ See Note
Feet from water line if applicable: *NC Code (No Less than 10 Feet)*	☒ 10 Plus Feet ☐ Less Than 10 Feet		☐ See Note
Distance P-tank is located from property line: *NC Code (No Less than 10 Feet)*	☒ 10 Plus Feet ☐ Less Than 10 Feet		☐ See Note
Were property lines flagged?	☐ Yes	☒ No	☐ See Note
Depth of pump tank below finished grade?	☒ 12 to 15 Inches		☐ See Note
Was a riser present?	☒ Yes	☐ No	☐ See Note
Type of riser (material used)?	☒ Plastic (Composite)		
Condition of pump tank riser lid?	☒ OK		
Condition of riser base?	☒ OK		
Condition of riser handles (if present)?	☒ No Handle (Handle not Necessary)		
Was a safety pan present?	☒ Yes		
Are roots present in pump tank?	☒ Grass Roots Only		
Does pump tank appear to be watertight?	☒ Yes		
Is leakage suspected?	☒ No		

SYSTEM INSPECTION REPORT:

Location of pump tank control panel box?	☒ Control Panel Box is Located Next to Pump Tank
Type of electrical panel box?	☒ Control Panel Box
Condition of control (panel-junction) box?	☒ OK
Panel box watertight?	☒ No (Reseal Around Conduit)
Height of panel box above finished grade?	☒ 4 Inches
Should panel box be raised?	☒ Recommend a Minimum of 12 In. above Grade
Audible alarm functioning? (Float)	☒ Yes
Visual alarm functioning? (Float)	☒ Yes
Alarm test switch working properly?	☒ Yes
Type of water sensors?	☒ Floats
Quick disconnect present?	☒ Yes
Backflow (check valve) present?	☒ Yes
Effluent pump operable?	☒ Yes
Effluent delivery to distribution device?	☒ Yes (Pumping to Distribution Device)

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COMMENTS:

At time of inspection, a copy of the septic permit from the Harnett County Department of Environmental Health was available. Installation of the septic tank, distribution device and nitrification area appear to be as shown on original issued permit from County. Risers were not present on either the inlet primary or outlet secondary chamber access openings. Risers are not required or necessary. Tank is buried between 4 to 6 inches beneath soil surface. Septic tank is located approximately 5 feet 6 inches from foundation of home which meets the 5 foot minimum required separation distance between a septic tank and homes built over a crawl space. Septic tank was not pumped at time of inspection, therefore, the inspection of the interior of tank was only done from the liquid level up to and including the free boarding area. Septic tank appeared to be watertight with no interior structural breach. Septic tank is a double chamber tank with interior dividing baffle wall. Visual inspection of exposed areas of baffle wall did not reveal any cracks, however, normal age-related corrosion was present. Inside/outside measurements confirmed the size of the septic tank and pump tank to be approximately 1,000 gallons each.

Septic tanks installed after, January 01, 1999, are installed with a PVC sanitary tee with an effluent strainer in outlet secondary chamber. At the time of inspection, effluent level in tank was slightly elevated above the invert of outlet. Effluent strainer was removed, cleaned, inspected, and re-inserted. Effluent level receded to normal operating depth. Invert of inlet wastewater supply pipe and invert of outlet wastewater supply pipe appear to be installed at the correct height. Scum thickness in inlet primary chamber was measured between 6 to 7 inches. Scum thickness in outlet secondary chamber was measured between 1/2 inch to 1 inch. Column sampling revealed inlet primary chamber sludge and mixed solid measurement to be approximately 6 to 8 inches. Depth of outlet secondary chamber sludge and mixed solids were measured at 3 to 5 inches. The depth of mixed solids and sludge in subject tank is consistent with tanks that have not had recent general pumping maintenance performed.

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Approximately 30 gallons of water was added to the inlet (primary) chamber of tank to observe liquid flow from inlet (primary) chamber to outlet (secondary) chamber. An additional 20 gallons of water was added to the outlet secondary chamber to check liquid flow from septic tank to pump tank. The pump tank consists of two (2) floats(on/off floats) and a high-water alarm float. The highwater alarm float and effluent pump are correctly wired on separate breakers in electrical panel box. Both were confirmed to be functioning, at time of inspection. Effluent is being pumped approximately 120 feet to a pressure manitee distribution device. At time of pump cycle, effluent delivery to the manitee and nitrification soil absorption area was confirmed.

Nitrification field was located, and a visual inspection was performed. Nitrification field consists of two (2) lines installed over polystyrene aggregate laterals approximately 150 feet in length. Probing confirmed the depth, however, the exact length or configuration of lines was not confirmed. Septic systems are subterranean, therefore, without exposing the actual nitrification lines and the soil absorption area beneath the lines it is impossible to make an accurate assessment of their overall condition. Caution should be observed to discourage heavy equipment, vehicular traffic or disturbing the soil in and around the nitrification field and its adjoining repair area. A copy of the original Authorization to Construct was available at time of inspection. Operation permit dated, 07-02-2008, issued by the Harnett County Department of Environmental Health verified the size of tanks (1,000 gallons each) and confirmed the length and depth of nitrification lines, in addition to the exact location of the designated repair area. FYI: The number of bedrooms was not stated on permit, however, the size of system is consistent with a 3 bedroom home.

For Your Information:

Per MLS, Zillow, and Realtor.com, subject property is listed as a 3 bedroom home. Systems permitted for 3 bedrooms are designed to allow 360 gallons of (ATAR gpd/ft) long-term acceptance rate/gallons per day/sq/ft of nitrification area making this system adequate in size for this property. Property lines were not flagged at time of inspection, therefore, the setback distance for nitrification lines could not be conclusively determined. Nitrification lines appear to be greater than the 10 feet minimum required separation distance from adjoining property, however, the exact distance could not be confirmed. Septic tank, should be pumped and cleaned on a 3 to 5 year rotation or sooner if needed, in addition to removing and cleaning the effluent strainer, when soiled.

It is recommended to avoid planting shrubbery or large trees around septic systems. Roots from trees can infiltrate septic tanks and cause irreversible damage. Trees or shrubbery should not be planted in or around nitrification field. Excessive root growth can penetrate the orifices and contribute to nitrification lines not functioning at their full capacity. It is always recommended to properly maintain the vegetation growth over nitrification areas. Planting appropriate vegetation over the drain field is key to allowing a septic system to properly treat household wastewater and ensure the safety of your family and the environment. Caution should be observed when watering the area directly over the nitrification lines. Excessive watering in some cases can cause nitrification field to become oversaturated and restrict the flow of effluent. Continuous drips of water into septic systems from leaking faucets or flappers on commodes can contribute to the oversaturation of nitrification ditches resulting in system malfunctioning.

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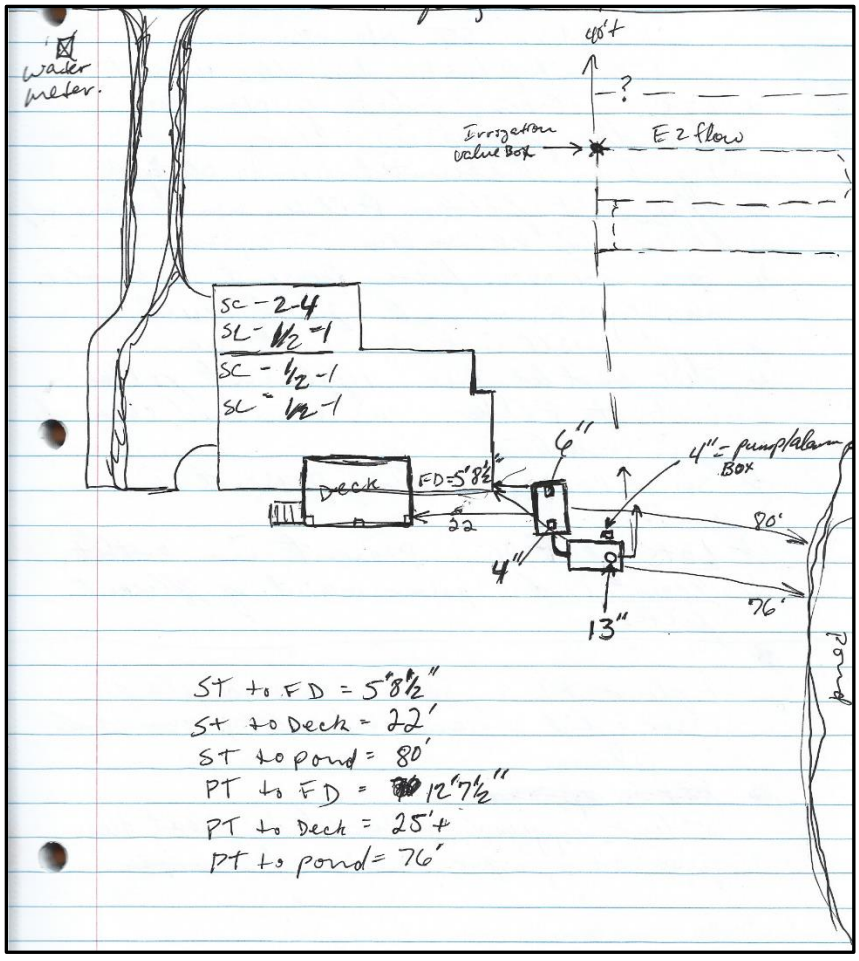
Gutters downspouts should always be diverted away from nitrification areas. In addition, all permanent structures should be a minimum of 5 feet from any or all portions of a septic tank and its connecting nitrification lines. Food waste disposal systems are not recommended in homes that are on septic systems. Garbage disposals increase the need for routine pumping. Eggshells, bones, and vegetables do not digest well and add more sludge to the tank. Baby or adult wipes, female hygiene products, plastics, and all non-biodegradable materials, should not be introduced to septic systems. Do not use sinks or toilets as trashcans. Dumping cooking oil, paper towels, household chemicals, paint, kitty litter, coffee grounds or even cigarette butts into sinks or toilets will increase the sludge layer in the tank resulting in the tank requiring more frequent pumping maintenance.

FYI: If a water softener is present or if one is installed in the future, it is recommended that the backwash water from the softener not be discharged directly into the wastewater dispersal system. In addition, the backwash should also not be discharged on the ground in and around the septic tank and the nitrification soil absorption area. These items have been linked directly to systems that have failed earlier than their normal life expectancy.

Field Notes (Diagram and measurements may not be exact):



FUTURE MAINTENANCE ITEMS:

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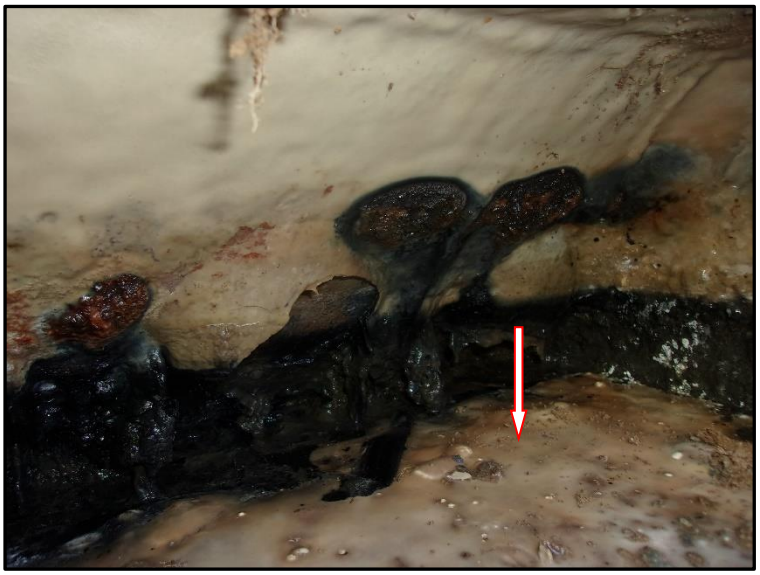
1). Considering the current depth of mixed solids, sludge, and the thickness of surface scum, in addition to non-biodegradable materials, it is recommended that septic tank be pumped and cleaned. FYI: To prevent a backup of sewage resulting in an interruption in service, periodic removal, and cleaning of the effluent strainer is also recommended. NC Septic System Rules and Regulation suggest that septic tanks be pumped on a 3 to 5 year rotation, or sooner, if necessary.

Inlet Primary Chamber Scum and Non-Biodegradable Materials:

Secondary Chamber (Scum):



SUGGESTED MAINTENANCE ITEMS:

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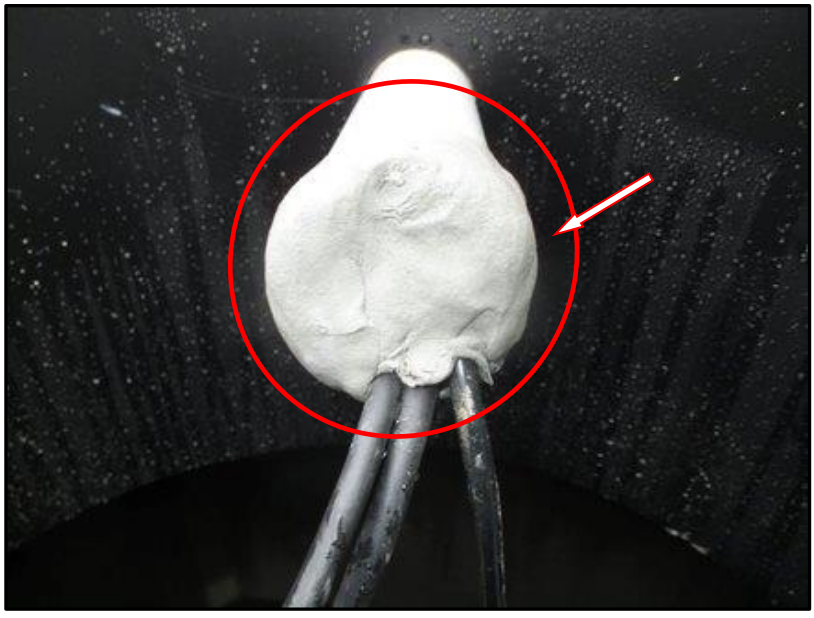
2). To prevent the infiltration of moisture and insects, it is recommended that plumber's putty or the appropriate sealant be installed in electrical conduit located in pump tank riser well.

Existing Conduit:

Example Sealant Around Electrical Supply Lines:



SUGGESTED MAINTENANCE ITEMS:

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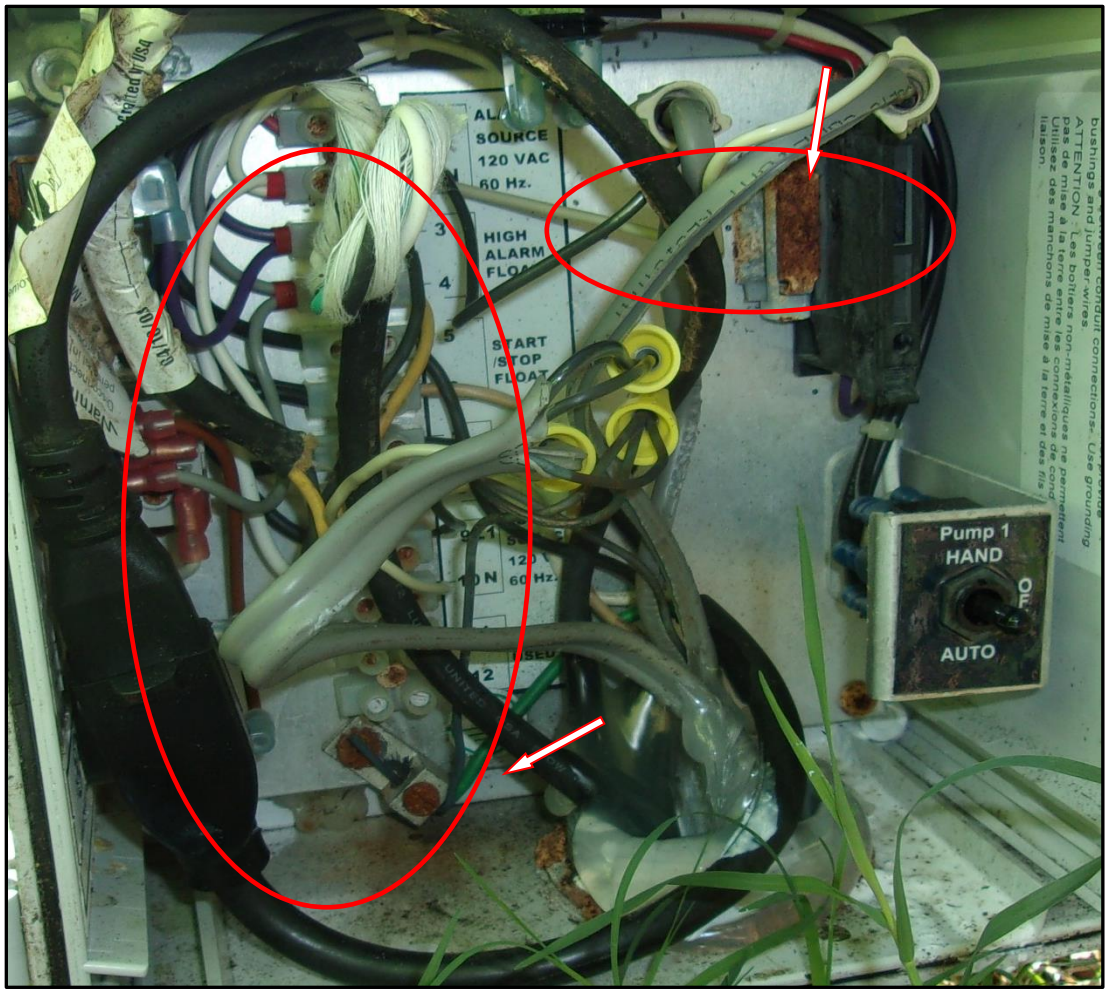
3). Electrical contacts in pump tank control panel box have rust and corrosion. To prevent possible electrical short, cleaning the terminals is recommended.

Pump Tank Control Panel Box:



SUGGESTED IMPROVEMENT ITEM:

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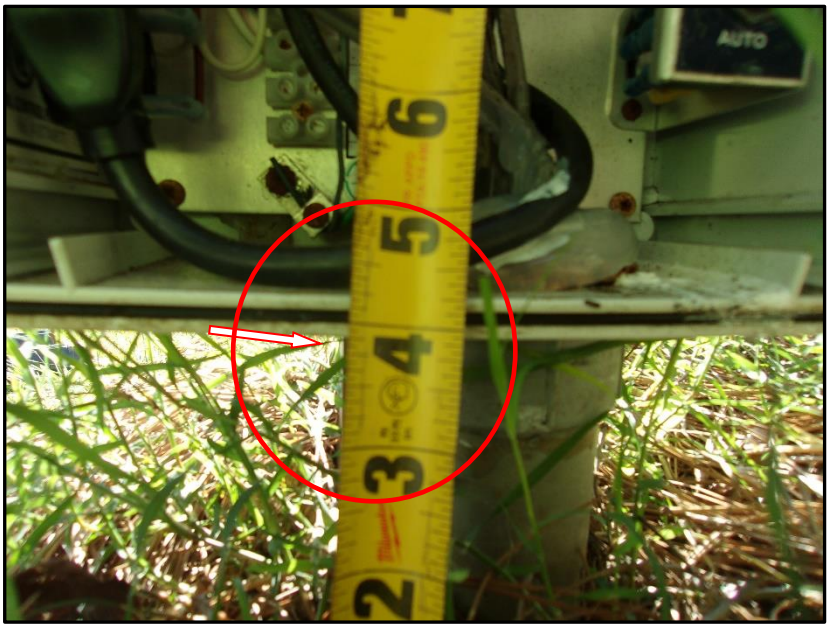
4). Pump tank Electrical Control Panel Box should be raised to a minimum of 12 inches above grade to prevent infiltration of surface water. In extreme rain events water possibly could reach levels of infiltration around base of box.

Existing Panel Box:



Example of Raised Panel Box:

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Nitrification field was located, and a visual inspection was performed. Nitrification field consists of two (2) lines, each approximately 150 feet in length. Probing confirmed the depth, however, the exact length or the configuration of nitrification lines was not confirmed. Septic systems are subterranean, therefore, without exposing the actual nitrification lines and the soil absorption area beneath the lines it is impossible to make an accurate assessment of their overall condition. Caution should be observed not to disturb the soil in and around the nitrification field and the adjoining designated repair area. It is always recommended to properly maintain the vegetation growth over nitrification areas. Planting appropriate vegetation over the leaching field is key to allowing a septic system to properly treat household wastewater and ensure the safety of your family and the environment. FYI: All permanent structures should be a minimum of 5 feet from any or all portions of a septic system. In addition, it is important to avoid equipment or vehicular traffic over the nitrification area.

Nitrification Area (Diagram of lines may not be exact):

FOR YOUR INFORMATION:

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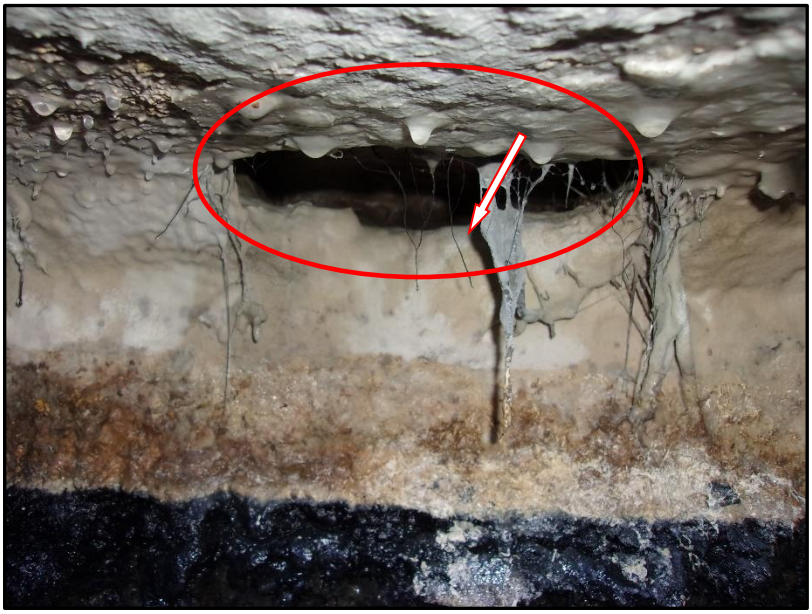
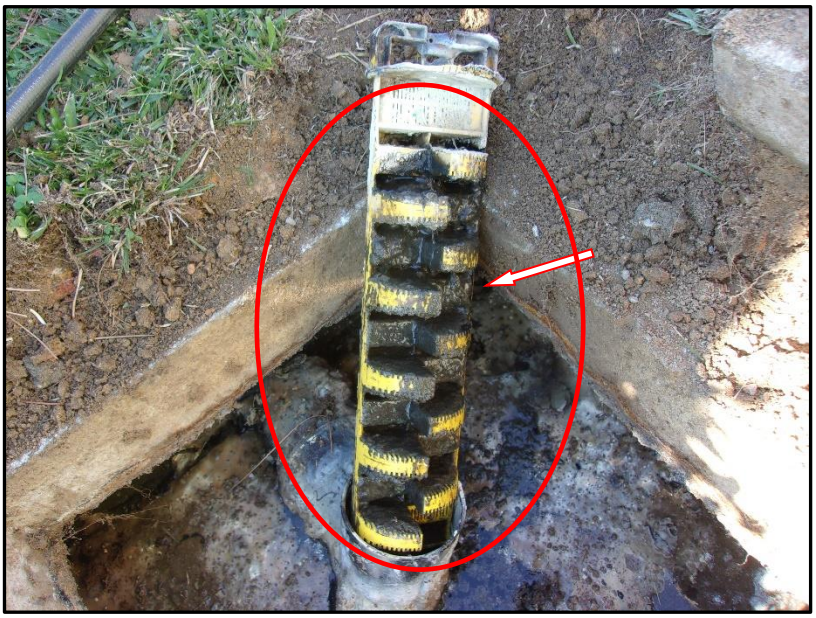
The following pictures suggest that this system, on occasions, has experienced a backup of sewage. This normally is the results of a power outage or a clogged strainer in outlet secondary chamber. To prevent an interruption in service, it is recommended that the effluent strainer be periodically removed and cleaned, when soiled.

Solids and Scum on Interior Dividing Baffle Wall Vent:



Soiled Effluent Strainer:



FOR YOUR INFORMATION:

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Corrosion and concrete etching was present at the static water line, in addition to areas of the sidewalls. This is a normal progression in concrete tanks. Periodic inspections are recommended, if etching is determined to be accelerating or advancing, a repair by "skim coating" this area may become necessary.

Age Related Concrete Etching and Sidewall Corrosion:

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No warranties or opinions are hereby given, written, or expressed otherwise, as to the past or future performance of the on-site wastewater system described herein. Septic systems are subterranean; therefore, it is impossible to determine their overall condition. This report comments on the condition of the system on the day of inspection only. For your information, the condition of this septic system can be altered by factors such as excessive rainfall, heavy water usage, faulty plumbing, physical damage, in addition to neglect. NC Septic Inspections makes no assurance for the continued performance of this or any on-site wastewater system. This on-site wastewater inspection is a presentation of system facts in place on the date of inspection and is not intended for use in negotiating a sale price. If this system or its components malfunction at any time during occupancy, a local Service Provider should be contacted so immediate repairs can be made. If at any time there is evidence of surfacing waste around septic tank or evidence of surfacing effluent over the nitrification field, the local Environmental Health Department should be notified so the appropriate permits can be issued, and immediate repairs can be made. Proper care and maintenance of a septic system will save time and money while also providing protection to our environment.

Helpful information pertaining to septic system management can be found on this North Carolina State University Web Site (www.soil.ncsu.edu).

Signature of Inspector: Kevin Hoskins Date: ***November 17, 2022***

Kevin Hoskins, Certified Inspector
NCOWCICB Certification #: 5712I

Report Prepared By: Venice D. Piner Date: ***November 21, 2022***

Venice D Piner, Certified Inspector
NCOWCICB Certification #: 3434I

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System Inspection Pictures

Page 1

Location of Tank:

Location of Pump Tank:

Exposed Inlet Access Opening:

Exposed Outlet Access Opening:

Primary Chamber (Scum):

Secondary Chamber (Scum):

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System Inspection Pictures

Page 2

Interior Dividing Baffle Wall:

Distance from Foundation:

Soiled Effluent Strainer:

Cleaned Effluent Strainer:

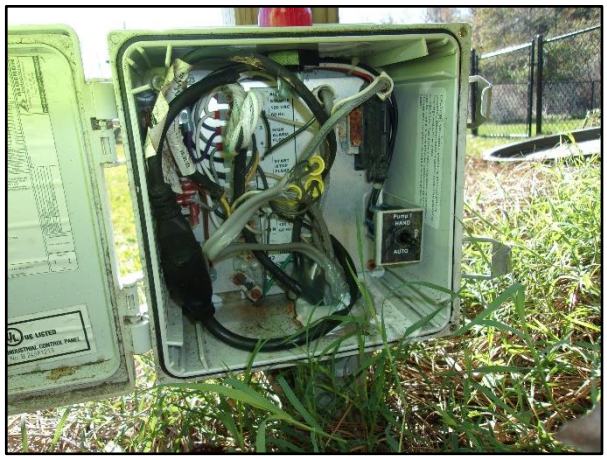
Primary Chamber Sludge Measurement:

Secondary Chamber Sludge Measurement:

System Inspection Pictures

Page 3

Pump Tank (Panel Box):



Pump Tank Ball Valve:

Floats:

Butterfly Valve:

Nitrification Field:

Re-covered Access Openings: