Septic Inspection Report

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Overall Summary

- Overall, the septic system was working properly at the time of the inspection.
- A septic system can last upwards of 40 years with proper maintenance.
- The septic system consists of a plastic septic tank with two chambers and a leaching bed field.
- The septic tank does not require a pump out at the present time. Septic tanks should be pumped out every 3 to 5 years or when the combined sludge and scum levels in the tank exceed 1/3 the working volume of the tank.
- An effluent filter is installed on the outlet baffle of the septic tank to further protect the leaching field from suspended particles.
- The plumbing pipe from the home to the septic tank is in good condition.
- The leaching field is in good condition to ensure water drains off the field.

Inspection Procedure

The inspection of the septic system at this property consisted of:

- A visual inspection of the septic tank including lids and access risers
- A visual inspection of the liquid level in the tank to ensure system is not backing up and there aren't any leaks from the septic tank
- A visual inspection of the visible portions of the septic tank above the liquid level
- A visual inspection of the inlet and outlet baffles
- A measurement of the sludge and scum levels in the septic tank using the 'Sludge Judge'
- A visual inspection of the leaching field
- A sewer camera inspection of the outlet pipe from the septic tank to the distribution box
- Performing a load test which simulates a day's use of water in a relatively short period of time

Site Conditions

Conditions at the time of the inspection were clear. The outdoor temperature was approximately 30 deg. C.
The septic tank and leaching field are located on the northeast side of the property in the front yard. The septic system is shown in Figure 1.

Fig. 1 Septic System Layout

Septic Tank

The septic tank is made of plastic and has two chambers. The tank holds approximately 2500 Liters of liquid. This volume is approximate as it was measured by a soil probe and measuring tape. This size of tank is considered small for this home by the latest version of the Ontario Building Code (3600 Liters minimum required). Any future expansion of the home will require the replacement of the septic tank and the leaching field.

Figure 2: Inlet Chamber of the septic tank (Working level – 3.5 feet – sludge measurement 4 inches, scum measurement 1-1/8 inches)

Both inlet and outlet chambers have baffles attached to the tank. These baffles help with reducing turbulence in the tank and directing solids to the bottom and preventing floating scum from entering the leaching field. The inlet baffle is readily accessible from the access lid.

Cleaning of the inlet baffle is recommended at the next tank pump out.

Figure 3: Outlet Chamber of the septic tank (Working level 3.5 feet, sludge measurement < 1 inch, scum measurement < 1/8 inch)

An effluent filter is readily installed on the outlet chamber of the septic tank. An effluent filter will prevent suspended solids from entering the leaching field.

Checking and cleaning of the effluent filter is recommended each year.

Figure 4: Effluent filter

The chambers of the tank were measured with a sludge judge (Figures 5) to determine if it requires a pump out.

The septic tank does not require a pump out currently. Septic tanks should be pumped out every 3 to 5 years or when the combined sludge and scum levels in the tank exceed 1/3 the working volume of the tank.

The inside plastic walls appear to be in fair condition.

Figure 5: Sludge judge

Leaching Field

A leaching field eventually fails when effluent cannot drain freely into the soil below the pipes. The reason for this is due to a buildup of a biological layer called the biomat. The biomat layer contains bacteria that feed on the effluent as it trickles out of the pipes in the leaching field. However, over time this layer becomes so thick that effluent cannot pass through it and eventually sewage will come up to the surface of the grass. The first sign of a failing leaching field is usually a back up of fixtures in the home.

Figure 6: Leaching Field (South looking North)

Figure 7: Leaching Field (North looking South)

The leaching field is in the northeast corner of the front yard. The leaching field consists of perforated pipe laid in trenches. The grading around the leaching field is currently in good condition.

End of Report