Public Health
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Jo Daviess County Health Department

How to Read a Soil Boring Report

The soil investigation report is an important piece of information. It describes the soil type, soil group, depth to bedrock, depth to seasonal wetness, as well as the depth, color, and texture of the different soil layers. The soil investigator will perform five or six soil borings in the proposed septic drainfield area.

The soil group, depth to bedrock, and depth to seasonal wetness are the most important factors in determining if a conventional drainfield can be installed. Modifications to the conventional drainfield include a field with shallow trenches or raised trenches. Where a conventional drainfield cannot be installed, a sandfilter is required.

The soil boring report is valid as long as the land described in the report has not been modified by cutting away the soil or by adding fill soil. The report only describes the top five feet of soil.

Soil boring Number: The number given to a specific boring. Soil borings are indicated by number on the soil investigation map.

Soil Type: Name of the soil found. This tells the soil scientist what group the soil is in.

Soil Group: There are eight soil groups. Groups 1-3 have suitable soils for a conventional drainfield. Groups 4-6 are not suitable for a conventional drainfield, but alternative drainfield designs (see below) are available. Groups 7 and 8 are not suitable for septic systems. **The type of system installed depends on the soil depth and group identified.**

Depth to Bedrock: The thickness of soil until bedrock is encountered.

Depth to Seasonal Wetness: The depth of soil above the perched water. If seasonal wetness is at a depth of 24 inches or less, a curtain drain will be needed.

Landscape Position: The general land description where borings were performed (see second page of soil boring report).

Boring Description: This area of the report describes the different soil layers in terms of depth, color, and texture.

Comments: This area of the report is where the soil scientist or soil investigator gives recommendations for the type of septic system needed.

Conventional Drainfield: Trenches can be installed at the 30 inch maximum.
Shallow Trenches: Trenches installed at 18-24 inches.
Raised Trenches: Trenches installed in undisturbed earth with 12 to 18 inches of fill.

Sandfilter: A sandfilter is required when adequate soil depth of 48 inches cannot be met.
A chlorinating chamber is required when the depth to bedrock is 24 inches or less.

If you have further questions about your soil boring please call the Division of Environmental Health at 777-0283 or 1-877-777-0283.

eh/borings/how-to