



# JACKSON COUNTY DEPARTMENT OF HEALTH

201 W Platt St Maquoketa IA 52060

P: 563-652-1729

## PERCOLATION TEST DATA FORM

911 Site Address: \_\_\_\_\_

Location Description: \_\_\_\_\_

Name of Owner: \_\_\_\_\_

Phone #: \_\_\_\_\_

Perc Test Company: \_\_\_\_\_

Phone #: \_\_\_\_\_

### ***READ ALL INSTRUCTIONS BEFORE BEGINNING THE TEST***

#### **PERCOLATION TEST INSTRUCTIONS**

Percolation tests and/or Soil Testing is required before any lateral field is installed. Only a Professional Engineer can perform Percolation tests in Jackson County. The following procedure must be performed in accordance with Chapter 69 Appendix B of the Iowa Administrative Code:

1. **A six-foot hole must be dug first.** If water or rock is encountered at less than six feet, the perc holes must be shallower to maintain the three-foot separation. Ex. If water is encountered at 5 feet then the test holes cannot be deeper than 24 inches. Record information on page 2 of this Form.
2. A minimum of 3 test holes, distributed evenly over the proposed lateral field are required, no less than 10 ft apart and spaced down gradient from each other. 50' is the preferred distance between borings.
3. Percolation test holes shall be 4 to 12 inches in diameter and the same depth as the proposed absorption trenches (maximum depth = 36")
4. Roughen or scratch sides and bottoms of the test holes to create a natural surface. Remove all loose material from each hole and cover the bottom of the test hole with 2 inches of rock to protect the bottom from scouring action when the water is added.
5. Presoak holes: Fill each hole with at least 12 inches of clean water being careful not to disturb the roughed surfaces. Maintain the depth for a minimum of 4 hours preferably overnight if clay soil is present. **It is extremely important to presoak each hole as recommended to allow for the soil to swell and obtain accurate results.** In sandy soils with little or no clay, soaking is not necessary. If the water seeps completely away in less than 10 minutes after filling the hole twice with 12 inches of water, the percolation test can be performed immediately.
6. With the exclusion of sandy soils, percolation testing should be done at least 4 hours but no more than 24 hours after the presoaking period began. Remove any soil that sloughed into the hole during presoaking and adjust the water level, so it is 6 inches above the gravel (8 inches from the bottom of the hole). **Do not allow** the water level to be any higher than 6 inches above the gravel at any time during the test.
7. Immediately measure and record the starting water level from the top of each hole. Each measurement should be made from a fixed point (i.e.. surface level) at 30-minute intervals.
8. Continue the test until the rate stabilizes and 2 successive water level drops do not vary by more than 1/8 inch. At least 3 measurements must be made, more as necessary.
9. After each measurement, the water level should be readjusted to the initial 6-inch level. The last water level drop is used to calculate the percolation rate.
10. In sandy soils or soils in which the first 6 inches of water added after the presoaking period seeps away in less than 30 minutes, measurements should be made every 10 minutes for 1 hour.
11. Record all results in the table on page 2 of this report form. These results must be submitted to this office along with the Application to Install or Repair Private Sewage Disposal System.

**Perc holes should be left open and flagged for inspection by the health department personnel after the completion of the test.**

Test Hole #1 Depth = _____ Time = _____	Time Interval 30 min or 10 min	Measurement In inches Start - End	Drop in water level, inches =	Percolation rate, min / inch (office use only)
Test Hole #2 Depth = _____ Time = _____	Time Interval 30 min or 10 min	Measurement In inches Start - End	Drop in water level, inches =	Percolation rate, min / inch (office use only)
Test Hole #3 Depth = _____ Time = _____	Time Interval 30 min or 10 min	Measurement In inches Start - End	Drop in water level, inches =	Percolation rate, min / inch (office use only)

How Long were the test holes pre-soaked: \_\_\_\_\_ \*make a copy of this page for additional test holes if needed

Date test performed: \_\_\_\_\_ Weather Conditions: \_\_\_\_\_

**6-Foot Test Hole:**

Total Depth	Depth to Ground Water		Depth to Bedrock		Character of Each Soil Layer with thickness in inches
	Observed	Estimated	Observed	Estimated	

I certify testing parameters were followed per Iowa code and the above information to be true and correct.

\_\_\_\_\_  
Signature of Engineer

\_\_\_\_\_  
Date