

This worksheet evaluates the pumping rate (GPM) at a given pressure of a small pump station and how often the pump cycles to supply the required volume of water. Determine the volume of water stored in a tank and how fast the tank refills (follow the guidelines below). Small pumping plants should be in demand less than two (2) continuous hr./day, otherwise pump burnout may occur.

1. Verify all other water uses on the system are turned off (No other water use can be in use during the test process).
2. Open any faucet and run until the pump turns "on".
3. Close the faucet and let the pump fill the pressure tank until it turns "off".
4. Open the faucet closest to the pressure tank and collect all the water discharged until the pump turns "on".
5. When the pump turns "on", close the faucet and start timing the pump cycle. (Pump "on" to pump "off")

Repeat the above process (items 2-5) three (3) times and average values then record below.

	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	Average
a) Record the pump cycle in seconds (step 3).	_____ sec.	_____ sec.	_____ sec.	_____ sec.-avg.
b) Measure the gallons collected (step 4).	_____ gal.	_____ gal.	_____ gal.	_____ gal.-avg.
c) Document Tank Pressure	_____ psi	_____ psi	_____ psi.	_____ psi -avg.
d) Calculate average pump rate (gal.-avg./ sec.-avg.) x 60 =	_____ gpm -avg.			
e) The required water rate is?	_____ GPM			
f) The required daily water volume is?	_____ GPD			
g) If "d" > "e", system rate OK	_____ OK _____ Not sufficient			
How long will the system run? (gpd/gpm/60)	_____ Hr. /Day _____ less than 2 hours?			
h) How many times will the pump cycle? ("hr/day"/ Sec-avg./60)	_____ Cycles per Day			