Capacity Development Program – Two-Part Pump Test Form for New Non-Transient Non-Community Public Water Systems

System Name: ______________________________________________________________

Public Water System Identification (PWS ID) Number (if assigned): ___________________

Date of Pump Test: __________________________________________________________

NOTE: Both pump tests must be performed during one continuous testing session.

Part I - Peak Demand Pump Test Requirements

Peak Water Demand/Pumping Rate:
Calculate Average Daily Demand (ADD) in accordance with NJAC 7:10-12.6(b) = _______ gpd
Divided by 1440min/day (or appropriate operational timeframe) = _______ gpm x 3 = __________

Peak Water Flow Rate (Maximum water flow rate through fixtures):
Determine # of fixtures ________ @ 3gpm per fixture = _____________ gpm

Peak Demand Time (Length of peak use period in minutes):

Peak Water Demand (gal)___ = ________ gal = __________minutes
Peak Water Flow Rate (gpm)                          gpm

The well must be pumped at a minimum of ______ gpm (peak demand pumping rate) for
______ minutes (peak demand time) to demonstrate the ability to meet peak water demands.

Part II - Constant Head Pump Test Requirements

Calculate ADD Pumping Rate: ____________gpd/1440min/day  = __________gpm

Note: The well pumping capacity must meet or exceed the average daily demand pumping rate at
a constant head condition to demonstrate the ability to meet the average daily demand.

The well must be pumped at a minimum of ______ gpm (average demand pumping rate) until a
constant head condition is established to demonstrate the ability to meet average daily water demands.

Note: The Constant Head Pump Test can be performed at higher pumping rates to demonstrate a
better well yield as long as a constant head condition can be established.

• Constant Head Condition exists when the pumping rate is held steady and the water level changes at a rate of
  less than 6 inches (0.5 ft.) per hour (minimum of two consecutive hours).
• A record of well yield (flow rate) and drawdown must be made at ½ hour intervals during the test.
• A record of water levels during the recovery period must also be made.
• Recovery Period: well recovers to at least 90% of static water level (prior to test) within 24 hours.