

# ENERGYWISE

Use less. Spend less. Do more.

## Irrigation Pump Test Form

Customer Name \_\_\_\_\_ Date \_\_\_\_\_

Daytime Phone Number \_\_\_\_\_ Customer Tax ID# \_\_\_\_\_

Electric Utility \_\_\_\_\_ Account Number \_\_\_\_\_

Pump Location (Legal Description)

Township # \_\_\_\_\_ Range # \_\_\_\_\_ Section # \_\_\_\_\_

County \_\_\_\_\_ DNR Reg. No. \_\_\_\_\_

Irrigation System Type      Pivot \_\_\_\_\_      Flood \_\_\_\_\_      Other \_\_\_\_\_

System gpm \_\_\_\_\_      System psi # \_\_\_\_\_      Acres irrigated \_\_\_\_\_

Pre-Improvement  
Test Values

Post-Improvement  
Test Values

\_\_\_\_\_ Static Water Level (ft.) \_\_\_\_\_

\_\_\_\_\_ +  
\_\_\_\_\_ Pumping Level Drawdown (ft.) \_\_\_\_\_

\_\_\_\_\_ +  
\_\_\_\_\_ Pressure (psi) x 2.31 \_\_\_\_\_

\_\_\_\_\_ +  
\_\_\_\_\_ Friction Losses (ft.) \_\_\_\_\_

\_\_\_\_\_ =  
\_\_\_\_\_ Total Dynamic Head (ft.) \_\_\_\_\_

\_\_\_\_\_ x  
\_\_\_\_\_ Flow (gpm) \_\_\_\_\_

\_\_\_\_\_ ÷  
\_\_\_\_\_ 3,960 \_\_\_\_\_

\_\_\_\_\_ =  
\_\_\_\_\_ Water horsepower output (hp) \_\_\_\_\_

\_\_\_\_\_ Voltage (v) \_\_\_\_\_

\_\_\_\_\_ x  
\_\_\_\_\_ Amperes (A) \_\_\_\_\_

\_\_\_\_\_ x  
\_\_\_\_\_ 1.732 \_\_\_\_\_

\_\_\_\_\_ x  
\_\_\_\_\_ Power Factor (pf %) \_\_\_\_\_

\_\_\_\_\_ ÷  
\_\_\_\_\_ 1,000 \_\_\_\_\_

\_\_\_\_\_ =  
\_\_\_\_\_ **Electric demand (kW)** \_\_\_\_\_

\_\_\_\_\_ x  
\_\_\_\_\_ 1.341 \_\_\_\_\_

\_\_\_\_\_ ÷  
\_\_\_\_\_ motor efficiency (%) \_\_\_\_\_

\_\_\_\_\_ =  
\_\_\_\_\_ pumping horsepower input (hp) \_\_\_\_\_

water horsepower output ÷ pumping horsepower input

\_\_\_\_\_ =  
\_\_\_\_\_ **Operating Plant Eff. (OPE %)** \_\_\_\_\_

( > 70% = excellent, 60% to 70% = good, 50% to 60% = fair, < 50% = poor )

Average annual use: (Specify gallons, hours, acre-inches per acre) \_\_\_\_\_

Average annual utility costs (Including energy & connection/hp charges) \_\_\_\_\_

Suggested Improvements (description) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Estimated cost of improvements (not a binding quote) \$ \_\_\_\_\_

Estimated annual savings with improvements \$ \_\_\_\_\_

Payback on improvements (# of years) \_\_\_\_\_ yrs.

Estimated electrical demand reduction (kW) with improvements \_\_\_\_\_ kW

Actual improvements (if different from Suggested Improvements above): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Completed only by local utility*

Incentive available if estimated electrical demand reduction is achieved: \$ \_\_\_\_\_

Utility Representative

Signature \_\_\_\_\_ Date: \_\_\_\_\_

Actual incentive provided after implementation of improvements: \$ \_\_\_\_\_

Utility Representative

Signature \_\_\_\_\_ Date: \_\_\_\_\_

Check if Pre-Installation Test Incentive applies Enter actual amount \$ \_\_\_\_\_  
(up to \$350.00)

*The actual incentive provided to the customer will be adjusted to reflect the actual electrical demand reduction achieved with the implementation of improvements to this irrigation system and verified by the actual kW demand value measured during the Post-Improvement Pumping Test.*

Pump Testing Company (Name) \_\_\_\_\_ Pump Testing Technician (Name) \_\_\_\_\_

Testing Company Phone number \_\_\_\_\_ Signature \_\_\_\_\_

All Program Guidelines, Terms, and Conditions Apply (See local utility for copy)