

IDAHO DEPARTMENT OF WATER RESOURCES
Water Measurement Program

POWER CONSUMPTION COEFFICIENT WORKSHEET

(Revised 6/2006)

District 11
 Diversion Name Todd Lloyd Pump
 Inventory Date _____ Test Date 7/30/07
 Inventory Examiner _____ Person performing test CB
 PCC o.k.? ☐ Yes ☐ No Exam complete? ☐ Yes ☐ No

Name:	<u>Preston-Monpelier Canal Co.</u>
Water Right No.:	<u>75</u>
Legal Description:	<u>T 14S R 45E Sec. 8 NE 1/4 SE 1/4 NW 1/4</u>
Site Tag No.:	_____
Diversion Name:	_____

Current Owner

Name Todd Lloyd Phone 847-1608
 Address _____ Cell 221-3010
 City Dingle St ID Zip _____ E-mail _____

Operator (if leased or operated by person other than owner)

Name _____ Phone _____
 Address _____ Cell _____
 City _____ St _____ Zip _____ E-mail _____

Global Positioning System Data:

Data Collection Filename A12027 Offset NONE
 IDWR Site Tag Identification No. A0012027
 Site Tag Location description: Post as you approach pump.
 PLS/USGS LOCATOR N 42° 13.353' W 111° 13.148'

For Department/District Use Only

Received by _____ Date _____
 Reviewed by _____ Date _____
 Data Entry By _____ Date _____

Well Pump and Motor Information

Pump Data		Motor Data	
Manufacturer	Centrifugal US Elec.	Manufacturer	U.S. Electric
Serial Number	7260102	Serial Number	
Model Number	326- R3EPB	Rated Horsepower	60hp
Type	R-I	Rated Amps	
Impeller Diameter	9-11-16	Rated Volts	
Rated Speed	3450	Rated Speed	
Rated Discharge	600 GPM	Phase	
Rated Head		Service Factor	

Booster Pump and Motor Information

Pump Data		Motor Data	
Manufacturer		Manufacturer	
Serial Number		Serial Number	
Model Number		Rated Horsepower	
Type		Rated Amps	
Impeller Diameter		Rated Volts	
Rated Speed		Rated Speed	
Rated Discharge		Phase	
Rated Head		Service Factor	

Power and Water Metering Information

Kilowatt-Hour Meter		Water Measurement Equipment and Pipe Information	
Utility	Pacificorp	Std. Meter Manufacturer	Fuji
Pole Number	085700	Std. Meter Model No.	31012
Meter Manufacturer	ABB	Std. Meter Type (circle one)	Sonic Pyg Collins Hall Anub Dye/chem. Other
Meter Serial No.	01847480	Std. Meter Confidence (circle one)	Excl. (2%) Good (5%) Fair 10% Poor >10%
Disc Constant (Kh)		PSI gauge ID location = discharge head	District / Owner _____ Yes / No
Rated Voltage		Pipe Material	alum.
Demand	41.75	Pipe Outside Diameter	8.06
Multiplier (Mult)		Pipe Inside Diameter	
CTR (Current) PTR (Voltage)		Distance of straight pipe upstream and down	Upstream _____ Downstream _____

Determination of Power Consumption Coefficient

Kilowatts of Energy Consumed

$$KW = 3.6 \times Kh \times \text{Multiplier} \times \text{No. of revolutions (N)} \div \text{Time (T) in seconds per N}$$

Cond.#1 N = 30 (No. of Disc Rev) Time (sec) = (37.69) + (39.71) + (40.66) / 3 = Ave

$$3.6 \times \text{ } (Kh) \times \text{ } (\text{Mult}) \times \text{ } (N) \div \text{ } (T) = * \text{ } KW$$

Cond.#2 N = (No. of Disc Rev) Time (sec) = () + () + () / 3 = Ave

$$3.6 \times \text{ } (Kh) \times \text{ } (\text{Mult}) \times \text{ } (N) \div \text{ } (T) = * \text{ } KW$$

Cond.#3 N = (No. of Disc Rev) Time (sec) = () + () + () / 3 = Ave

$$3.6 \times \text{ } (Kh) \times \text{ } (\text{Mult}) \times \text{ } (N) \div \text{ } (T) = * \text{ } KW$$

Measured Flow Rate and Discharge Pressure – Enter flow rate as determined by the "standard" water measurement meter in GPM, and discharge pressure measured in PSI. Attach documentation to support data such as notes, printout tapes, etc.

GPM Cond. #1 * #2 * #3 *

PSI Cond. #1 * #2 * #3 *

Power Consumption Coefficient (PCC) = KW × 5431 ÷ GPM

$$\text{PCC Cond \#1} = * \text{ } (KW) \times 5431 \div * \text{ } (gpm) = \text{ } (kWh/ac.ft)$$

Qualifier Condition 1: 1 2 3 4 5 6 7 8 9 Other

Percent of seasonal use * Description *

$$\text{PCC Cond \#2} = * \text{ } (KW) \times 5431 \div * \text{ } (gpm) = \text{ } (kWh/ac.ft)$$

Qualifier Condition 2: 1 2 3 4 5 6 7 8 9 Other

Percent of seasonal use * Description *

$$\text{PCC Cond \#3} = * \text{ } (KW) \times 5431 \div * \text{ } (gpm) = \text{ } (kWh/ac.ft)$$

Qualifier Condition 3: 1 2 3 4 5 6 7 8 9 Other

Percent of seasonal use * Description *

Is the system operator required to track and report changes in system operation? ~ Yes ~ No (check one) 60 - 3/16

System Type (circle all that apply): Pivot, linear / Wheel In / Hand In / Gated pipe, flood / Drip / Open Discharge H.L.

	Crop Type	Number of Acres
1	<u>alfalfa - upper fields</u>	
2		
3		
4		
Total Acres =		

WATER LEVEL DATA	
Does the well have access to measure water levels? ~ Yes ~ No (check one)	
Is this well part of USGS, IDWR, or another <u>network</u> of water level monitoring wells? ~ Yes ~ No ~ Uncertain	
Static Water Level _____ ft Date _____	Pumping Water Level _____ ft at condition # _____) Date _____

Further describe system operating conditions (if necessary) and how percentage of seasonal use was obtained: _____

Sketch of pumping plan layout or photograph of pumping plant and piping:

Notes – Comments – Calculations: This is part of the Preston - Montpelier Canal Co. They need to file a transfer to add this pump as a point of diversion.

Todd has 5 shares in the Preston - Montpelier

I certify that the above information is true and correct to the best of my knowledge and ability and the measurements taken and recorded are in accordance with the standards and specifications of the equipment used.

Signature _____ Date _____

(person performing measurements)