

IDAHO DEPARTMENT OF WATER RESOURCES
Water Measurement Program

POWER CONSUMPTION COEFFICIENT WORKSHEET

(Revised 6/2006)

*108 cfs.
Ingrlet/Lamont 484 GPM*

District 13
 Diversion Name alex - Ingrlet, Bruce Lamont
 Inventory Date 7/19/07 Test Date _____
 Inventory Examiner CBird Person performing test _____
 PCC o.k.? ☐ Yes ☐ No Exam complete? ☐ Yes ☐ No

Name:	_____
Water Right No.:	_____
Legal Description:	T _____ R _____ Sec. _____ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$
Site Tag No.:	_____
Diversion Name:	_____

Current Owner

Name David Bosen Phone 221-8690
 Address _____ Cell _____
 City _____ St _____ 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 A15824 Offset None

IDWR Site Tag Identification No. A0015824

Site Tag Location description: float for pump

PLS/USGS LOCATOR N42° 01.609' W111° 55.259'

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		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	

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		Std. Meter Manufacturer	
Pole Number		Std. Meter Model No.	
Meter Manufacturer		Std. Meter Type (circle one)	Sonic Pyg Collins Hall Anub Dye/chem. Other
Meter Serial No.		Std. Meter Confidence (circle one)	Excl 2% Good 5% Fair 10% Poor >10%
Disc Constant (Kh)		PSI gauge ID location \equiv discharge head	District / Owner _____ Yes / No
Rated Voltage		Pipe Material	
Demand		Pipe Outside Diameter	
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 = _____ (No. of Disc Rev) Time (sec) = (____)+(____)+(____)/3 = _____ Ave

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

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

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

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

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

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)

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

	Crop Type	Number of Acres
1		
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:

30 hp elec. pump RPM 1400
 1/4 mi - wheel-line
 hand lines 60 heads 5/16";
 - pump to an open ditch to a pond,

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

Notes – Comments – Calculations:

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)



photo 1646 David Bosen.