~~410040~~
410037

PCC W 7-02

IDAHO DEPARTMENT OF WATER RESOURCES
Water Measurement Program

POWER CONSUMPTION COEFFICIENT WORKSHEET

(Revised 7/2002)

District 36A

Diversion Name

Inventory Date

Test Date 7-16-04

Inventory Examiner

Person performing test C. Knowles / Lynn Gallagher

PCC o.k.? ☒ Yes ☐ No

Exam complete? ☒ Yes ☐ No

Name: Musser

Water Right No.:

Legal Description: T 07S R 14E Sec. 31 NE ¼ NE ¼ NW ¼

Site Tag No.: 10000470

Diversion Name: Musser Pump @ Spring CRK

Current Owner

Name

Phone

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

Offset

IDWR Site Tag Identification No.

Site Tag Location description:

PLS/USGS LOCATOR

For Department/District Use Only

Received by Date

Reviewed by Date

Data Entry By Date

PCC W 4-02

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	IPCO	Std. Meter Manufacturer	
Pole Number	07514E3140	Std. Meter Model No.	
Meter Manufacturer	ABB	Std. Meter Type (circle one)	Sonic Pyg Collins Hall Anub Dye/chem. Other
Meter Serial No.	04281353	Std. Meter Confidence (circle one)	Excl 2% Good 5% Fair 10% Poor >10%
Disc Constant (Kh)	21.6	PSI gauge ID location ≅ discharge head	District / Owner ______ Yes / No
Rated Voltage	460	Pipe Material	
Demand	15.15	Pipe Outside Diameter	
Multiplier (Mult)	x1	Pipe Inside Diameter	
CTR (Current) PTR (Voltage)	N/A	Distance of straight pipe upstream and down	Upstream ______ Downstream ______

Determination of Power Consumption Coefficient

Kilowatts of Energy Consumed

KW = 3.6 × Kh × Multiplier × No. of revolutions (N) ÷ Time (T) in seconds per N

Cond.#1 N = 10 (No. of Disc Rev) **Time** (sec) = (56.73)+(56.78)+(56.78)/3 = 56.76 Ave
3.6 × 21.6 (Kh) × 1 (Mult) × 10 (N) ÷ _____ (T) = * 13.699 KW

Cond.#2 N = _______ (No. of Disc Rev) **Time** (sec) = (_____)+(_____)+(_____)/3 = ______ Ave
3.6 × ______ (Kh) × ______ (Mult) × ______ (N) ÷ ______ (T) = *__________KW

Cond.#3 N = _______ (No. of Disc Rev) **Time** (sec) = (_____)+(_____)+(_____)/3 = ______ Ave
3.6 × ______ (Kh) × ______ (Mult) × ______ (N) ÷ ______ (T) = *__________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 * 286.1 #2 * ______________ #3 * ______________
PSI Cond. #1 * ______________ #2 * ______________ #3 * ______________

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

PCC Cond #1 = * 13.699 (KW) × 5431 ÷ * 286.1 ~~237.1~~ (gpm) = 260.06 ~~313.79~~ (kWh/ac.ft)
Percent of seasonal use * 100 Description * 5 H.L.

PCC Cond #2 = * __________(KW) × 5431 ÷ * _________(gpm) = __________(kWh/ac.ft)
Percent of seasonal use * ________ Description * ________________________

PCC Cond #3 = * __________(KW) × 5431 ÷ * _________(gpm) = __________(kWh/ac.ft)
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 network 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:

7 Birds + leaky Valve opener

= 310 meas total ÷ 10 = 31 gpm + 5 gpm leak

total 36 gpm

87.6 GPM H.L FAR west side of field

Running to the North

49.2

64.3

5 lines Running @ time of meas.

49

36 gpm

87.6 gpm

49.2

64.3

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)

Mueser
Pcc

```
OUTER DIAMETER
3.0299    IN

PIPE MATERIAL
?        AL.DI

WALL THICKNESS
0.0441    IN

SPACING
1.390     IN V

16:40+462.565E-1GPM   00R
     +  2.185E 0FPS   00R
      +00000 *G       00R
      -00000 *G       00R

16:41+490.303E-1GPM   00R
     +  2.316E 0FPS   00R
      +00048 *G       00R
      -00000 *G       00R

16:42+490.303E-1GPM   00R
     +  2.316E 0FPS   00R
      +00098 *G       00R
      -00000 *G       00R

16:43+477.094E-1GPM   00R
     +  2.253E 0FPS   00R
      +00147 *G       00R
      -00000 *G       00R

16:44+467.320E-1GPM   00R
     +  2.208E 0FPS   00R
      +00195 *G       00R
      -00000 *G       00R

16:45+500.606E-1GPM   00R
     +  2.365E 0FPS   00R
      +00244 *G       00R
      -00000 *G       00R

16:46+487.397E-1GPM   00R
     +  2.303E 0FPS   00R
      +00294 *G       00R
      -00000 *G       00R

16:47+499.285E-1GPM   00R
     +  2.358E 0FPS   00R
      +00343 *G       00R
      -00000 *G       00R

16:48+486.076E-1GPM   00R
     +  2.296E 0FPS   00R
      +00392 *G       00R
      -00000 *G       00R

16:49+477.094E-1GPM   00R
     +  2.253E 0FPS   00R
      +00442 *G       00R
      -00000 *G       00R

16:50+496.643E-1GPM   00R
     +  2.345E 0FPS   00R
      +00490 *G       00R
      -00000 *G       00R
```

49.0
Gpm

```
16:51+554.761E-1GPM   00I
     +  2.621E 0FPS   00I
      +00543 *G       00I
      -00000 *G       00I
```

```
0111.4   MMSEC
101.41   % T0

07-16 17:0600 *R
+002.90 %  AI2

17:10+881.278E-1GPM   00R
     +  4.163E 0FPS   00R
      +01492 *G       00R
      -00000 *G       00R
```

Ø

```
17:11+884.712E-1GPM   00R
     +  4.179E 0FPS   00R
      +00085 *G       00R
      -00000 *G       00R

17:12+884.712E-1GPM   00R
     +  4.179E 0FPS   00R
      +00173 *G       00R
      -00000 *G       00R

17:13+864.106E-1GPM   00R
     +  4.081E 0FPS   00R
      +00261 *G       00R
      -00000 *G       00R

17:14+882.070E-1GPM   00R
     +  4.166E 0FPS   00R
      +00349 *G       00R
      -00000 *G       00R

17:15+869.654E-1GPM   00R
     +  4.107E 0FPS   00R
      +00436 *G       00R
      -00000 *G       00R

17:16+900.826E-1GPM   00R
     +  4.255E 0FPS   00R
      +00524 *G       00R
      -00000 *G       00R

17:17+885.504E-1GPM   00R
     +  4.183E 0FPS   00R
      +00613 *G       00R
      -00000 *G       00R

17:18+839.803E-1GPM   00R
     +  3.966E 0FPS   00R
      +00700 *G       00R
      -00000 *G       00R

17:19+881.278E-1GPM   00R
     +  4.163E 0FPS   00R
      +00788 *G       00R
      -00000 *G       00R

17:20+869.654E-1GPM   00R
     +  4.107E 0FPS   00R
      +00876 *G       00R
      -00000 *G       00R
```

87.6
Gpm

```
07-16 18:0500 *R
+003.00 %  AI2

0111.7   MMSEC
101.67   % T0

18:08+648.014E-1GPM   00R
     +  3.061E 0FPS   00R
      +00000 *G       00R
      -00000 *G       00R

18:09+652.769E-1GPM   00R
     +  3.083E 0FPS   00R
      +00064 *G       00R
      -00000 *G       00R

18:10+653.561E-1GPM   00R
     +  3.087E 0FPS   00R
      +00129 *G       00R
      -00000 *G       00R

18:11+615.256E-1GPM   00R
     +  2.906E 0FPS   00R
      +00193 *G       00R
      -00000 *G       00R

18:12+627.937E-1GPM   00R
     +  2.965E 0FPS   00R
      +00257 *G       00R
      -00000 *G       00R

18:13+661.222E-1GPM   00R
     +  3.123E 0FPS   00R
      +00322 *G       00R
      -00000 *G       00R

18:14+649.335E-1GPM   00R
     +  3.067E 0FPS   00R
      +00385 *G       00R
      -00000 *G       00R

18:15+645.108E-1GPM   00R
     +  3.047E 0FPS   00R
      +00450 *G       00R
      -00000 *G       00R

18:16+639.560E-1GPM   00R
     +  3.021E 0FPS   00R
      +00514 *G       00R
      -00000 *G       00R

18:17+639.560E-1GPM   00R
     +  3.021E 0FPS   00R
      +00579 *G       00R
      -00000 *G       00R

18:18+643.787E-1GPM   00R
     +  3.041E 0FPS   00R
      +00643 *G       00R
      -00000 *G       00R
```

64.3
Gpm