RECEIVED
JAN 23 2008
DEPT. OF WATER RESOURCES
SOUTHERN REGION

STATE OF IDAHO
WATER DISTRICT 130
WATER MEASUREMENT ANNUAL REPORT

REPORTING YEAR 2007

POWER CONSUMPTION METHOD OF ESTIMATING DIVERSIONS

ATTENTION: Year end data must be submitted to Water District 130, 1341 Fillmore St. Ste 200, Twin Falls ID 83301, on or before **January 15, 2008.**

Reporter Name:	___	DAVE COATES BLACK CANYON BLISS LLC		_____
Legal Description:	T___	06S 13E 17 SESE Irrigation turbine		_1/4 _____1/4
Site Tag No:	___	A0007888 410256	2	_____
Diversion Name:	_____			

SECTION I Water Right Holder/Operator information
(If there are multiple water right holders on a common ditch or conveyance system, please designate the contact person below)

Current Water Right Owner Please check for address correction ☐

Name Black Canyon Bliss LLC Phone 436-9373
Last, First, MI

Address 224 Reed Ave Fax

City Rupert Id Mobile

State & Zip Id. 83350 e-mail

Operator or Contact Person (if different from owner)

Name Windy Acres Phone 208-934-4555
Last, First, MI

Address 1961 S. 1800 E. Fax

City Gooding Mobile

State & Zip Id 83330 e-mail

SECTION II Water Use Information

Crop	Acres	Non-Irrigation Use(s)
HAY	~~100~~ 98	~~~~
Total acres		
Number of idled acres	6	

3/14/08

SECTION III Utility Information (REQUIRED INFORMATION)

Electric Utility IP **Power Pole No.** _____

Customer **ACCOUNT NO.** 951 555 8301

SERVICE LOCATION NO. (10 digits) 06S 13E 1740

Electric meter **Serial No.** _____ (Beginning of season)

Electric meter **Serial No.** 0161669801 (End of season, if different)

Electric Meter Manufacturer _____

SECTION IV Modifications made during reporting year and other comments

Please describe in the space below any major modifications made to the diversion works or piping system during the past reporting year.

SECTION V Certification

I hereby certify that the above reported information is correct to the best of my knowledge and that I recognize that willful submittal of false or inaccurate data is a violation of law subject to the penalty provisions of Sections 42-311, 42-350 and 42-351, Idaho Code.

Bryan Hentzsch _____ 1-21-08

Signature Title Date

For Black Canyon LLC.

For Department Use Only

Reviewed by _____ Date _____

Data entry by _____ Date _____

PCC W 5-09

IDAHO DEPARTMENT OF WATER RESOURCES
Water Measurement Program

POWER CONSUMPTION COEFFICIENT WORKSHEET

(Revised 5/2009)

District WD-130

Diversion Name River Road Irrigation Turbine 410256

Inventory Date _____ Test Date 7-29-13

Inventory Examiner _____ Person performing test Jim B.

PCC o.k.? ☐ Yes ☐ No Exam complete? ☐ Yes ☐ No

Name: Dave Coats - Black Canyon Bliss, LLC
Water Right No.: _____
Legal Description: T 06S R 13E Sec. 17 ___ ¼ SE ¼ SE ¼
Site Tag No.: A0017808
Diversion Name: _____

Current Owner

Name Black Canyon Bliss Phone 436-9373

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 Jim B Date 11-15-13

Well Pump and Motor Information

Pump Data		Motor Data	
Manufacturer		Manufacturer	US Electrical
Serial Number		Serial Number	R-8889-00-H-845
Model Number		Rated Horsepower	50
Type		Rated Amps	60
Impeller Diameter		Rated Volts	460
Rated Speed		Rated Speed	
Rated Discharge		Phase	
Rated Head		Service Factor	

Booster Pump and Motor Information

51.15
52.5

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 Manf/Std Meter Model No.	Fuji-Janus
Pole Number	065, 13E, 17, 40	Std. Meter Type (circle one)	Sonic Pyg Collins Hall Anub Dye/chem. Other
Meter Manufacturer	GE	Std. Meter Confidence (circle one)	Excl Good Fair Poor 2% 5% 10% >10%
Meter Serial No.	45668 421	PSI gauge ID location ≅ discharge head	District / Owner 85 Yes / No
Disc Constant (Kh)	21.6	Pipe Material	Steel-Carbon
Rated Voltage	480	Pipe Outside Diameter	10.06
Demand	50.44	Sound Speed (58.5 F = 4807 fps) in feet per second	4875
Multiplier (Mult)	1	Measured Velocity (fps)	2.77
CTR (Current) PTR (Voltage)		Distance of straight pipe upstream and down	Upstream _____ Downstream _____

Readout = 660 gpm

55 = 4lbs

THICK-0.103
55 = 7.346

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 = 17 (No. of Disc Rev) **Time** (sec) = (27.85)+(29.95)+(29.79)/3 = 29.86 Ave

3.6 × 21.6 (Kh) × 1 (Mult) × 17 (N) ÷ 29.86 (T) = * 44.27 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 * 653.8 #2 * _____ #3 * _____

PSI Cond. #1 * 85 #2 * _____ #3 * _____

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

PCC Cond #1 = * 44.27 (KW) × 5431 ÷ * 653.8 (gpm) = 367.74 (kWh/ac.ft)

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

Percent of seasonal use * _____ Description * _____

PCC Cond #2 = * _____(KW) × 5431 ÷ * _____(gpm) = _____(kWh/ac.ft)

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

Percent of seasonal use * _____ Description * _____

PCC Cond #3 = * _____(KW) × 5431 ÷ * _____(gpm) = _____(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 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:

Notes – Comments – Calculations: Totalizer = 6560 gal. = 656 gpm
4 wheel lines on melons, hay
Thickness = 0.103
Signal Strength = 4 bars

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 7-29-13
(person performing measurements)

PCC Qualifiers

1- Simple System with one operating condition, current valid PCC
2- Multiple operating conditions, all PCC measured and within 10%
3- Multiple Operating conditions, PCC's differ > 10%, tracking required
4- Multiple Operating Conditions PCC's differ > 10% tracking not reported use Low PCC
5- Multiple Operating Conditions not all PCC's avaible but could be
6- Known problems with Reported KwH data
7- Measured PCC during flow meter Calibration
8- Complex system where time clock or flowmeter may be more accurate
9- PCC estimated, not actually determined by measurement
10- N- No PCC Measurements made
11- Q- Other qualifying conditions see PCC comments for explanation
12- Z- Zero Pumpage

LD02
No. 02
LOG NAME:410256
START :07-29 15:15
END :07-29 15:25
INTERVAL:00:01:00

########
+2.783E+0 ft/s
+6.615E+2 gal/m
+TOTAL 0000000 gal
-TOTAL 0000000 gal
NORMAL

########
+2.725E+0 ft/s
+6.478E+2 gal/m
+TOTAL 0000648 gal
-TOTAL 0000000 gal
NORMAL

########
+2.773E+0 ft/s
+6.591E+2 gal/m
+TOTAL 0001310 gal
-TOTAL 0000000 gal
NORMAL

########
+2.738E+0 ft/s
+6.510E+2 gal/m
+TOTAL 0001971 gal
-TOTAL 0000000 gal
NORMAL

########
+2.765E+0 ft/s
+6.574E+2 gal/m
+TOTAL 0002628 gal
-TOTAL 0000000 gal
NORMAL

########
+2.697E+0 ft/s
+6.413E+2 gal/m
+TOTAL 0003280 gal
-TOTAL 0000000 gal
NORMAL

########
+2.685E+0 ft/s
+6.384E+2 gal/m
+TOTAL 0003928 gal
-TOTAL 0000000 gal
NORMAL

########
+2.694E+0 ft/s
+6.406E+2 gal/m
+TOTAL 0004581 gal
-TOTAL 0000000 gal
NORMAL

653.8 gpm

########
+2.757E+0 ft/s
+6.554E+2 gal/m
+TOTAL 0005239 gal
-TOTAL 0000000 gal
NORMAL

########
+2.748E+0 ft/s
+6.533E+2 gal/m
+TOTAL 0005890 gal
-TOTAL 0000000 gal
NORMAL

########
+2.741E+0 ft/s
+6.516E+2 gal/m
+TOTAL 0006538 gal
-TOTAL 0000000 gal
NORMAL

PCC2 7-28-97 V3

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Water Measurement Program

POWER CONSUMPTION COEFFICIENT WORKSHEET

District * 130 Inventory Date * 6/17/08 Inventory Examiner * MR/CY PCC ok? *Yes / no

Date of test * _____ Person performing test * MR/CY Exam complete? *Yes / no

Name: Irrigation Turbine - Black Canyon Bliss

Water Right No: _____

Legal Description: T_____ R_____ Sec._____ _____¼ _____¼ _____¼

Site Tag No: A00 1780 8

Diversion Name: _____

Current Owner

Name Black Canyon Bliss Phone _____
Last, First, MI

Address _____ City _____ State _____ Zip _____

Operator (if leased or operated by someone else)

Name Gillette, Rusty Phone _____
Last, First, MI

SECTION I WELL SITE IDENTIFICATION

Global Positioning System Data:

Data Collection Filename * _____ Offset * _____

IDWR Site Tag Identification No. * _____

Site Tag location description: * _____

PLS/USGS Locator _____

Diversion Name * _____

_____

For Department/District Use Only

Received by _____ ***Date*** _____

Reviewed by _____ ***Date*** _____

Data Entry by _____ ***Date*** _____

Well Pump and Motor Information

PUMP DATA	
Manufacturer	
Serial Number	
Model Number	
Type	
Impeller Diameter	
Rated Speed	
Rated Discharge	
Rated Head	

MOTOR DATA	
Manufacturer	US Elec
Serial Number	R8889~~00~~H845
Rated Horsepower	* 50
Rated Amps	
Rated Volts	
Rated Speed	
Phase	
Service Factor	

Booster Pump and Motor Information

PUMP DATA	
Manufacturer	
Serial Number	
Model Number	
Type	
Impeller Diameter	
Rated Speed	
Rated Discharge	
Rated Head	

MOTOR DATA	
Manufacturer	
Serial Number	
Rated Horsepower	*
Rated Amps	
Rated Volts	
Rated Speed	
Phase	
Service Factor	

Power and Water Metering Information

KILOWATT-HOUR METER	
Utility	* IPCO
Pole No.	* 065136 17-40
Meter Manufacturer	* Elster
Meter Serial No.	* 06698094
Disc Constant(Kh)	* 21.6
Rated Voltage	480 V
Demand (Max Kw)	47.74)
Multiplier (Mult)	*
CTR (Current) PTR (Voltage)	

WATER MEASUREMENT EQUIPMENT and PIPE INFORMATION	
Std Meter Manufacturer	
Std Meter Model No.	
Std Meter Type	*Sonic Pyg Collins Hall Anub Dye/chem Other
Std. Meter Confidence	*Excl (2%) Good (5%) Fair (10%) Poor (>10%)
PSI gauge ID location = disch head?	*District / Owner ____ *Yes / No
Pipe material	CS
Pipe Outside Diameter	10.04"
Pipe ~~Inside Diameter~~ thickness	.105
Distance of straight pipe upstream and down	Upstream /Down

7,331 on FLGIS

crop	acres
1 Hay	
2	
3	
4	
total	

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 = 15 (No. of Disc Rev) **Time** (sec) = (25.03)+(24.78)+(25.08)/3 = 24.96 Ave

3.6 × 21.6 (Kh) × _____ (Mult) × 15 (N) ÷ 24.96 (T) = * 46.73 KW

(× 1.34 = 62 HP ≈ Pump HP)

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* 709.6 #2 * _____ #3 * _____

PSI Cond. #1* 62 psi #2 * _____ #3 * _____

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

PCC Cond. #1 = * 46.73 (KW) × 5431 ÷ * 709.6 (gpm) = 357.65 (kWh/ac.ft)

typ range 200 - 1000

Percent of seasonal use * ? Description * 5 Wheel Lines in use

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
(see form PCC3)

System Type (all that apply): *Pivot, linear / Wheel ln / Hand ln / Gated pipe, flood / Drip/ Open dsch

Water Level Data

Does the well have **access** to measure water levels? * Yes / No

Is this well part of USGS, DWR, or another **network** of water level monitoring wells? *Yes / No / Uncertain

Static Water Level * _____ ft **Pumping Water Level** * _____ ft (at condition # _____)

Date * _____ **Date** * _____

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

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

Comments: Signal – 4 bars Sound 4852

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)

Black Canyon Bliss PCC

LOG NAME:A0017808
START :06-17 13:45
END :06-17 13:55
INTERVAL:00:01:00

707.3 gpm

6/17/2008 13:45
+3.015E+0 ft/s
+7.132E+2 gal/m
+TOTAL 0000000 gal
NORMAL

6/17/2008 13:46
+2.973E+0 ft/s
+7.033E+2 gal/m
+TOTAL 0000698 gal
NORMAL

6/17/2008 13:47
+3.039E+0 ft/s
+7.188E+2 gal/m
+TOTAL 0001412 gal
NORMAL

6/17/2008 13:48
+3.011E+0 ft/s
+7.122E+2 gal/m
+TOTAL 0002120 gal
NORMAL

6/17/2008 13:49
+2.963E+0 ft/s
+7.009E+2 gal/m
+TOTAL 0002826 gal
NORMAL

6/17/2008 13:50
+2.921E+0 ft/s
+6.910E+2 gal/m
+TOTAL 0003535 gal
NORMAL

6/17/2008 13:51
+2.960E+0 ft/s
+7.003E+2 gal/m
+TOTAL 0004237 gal
NORMAL

6/17/2008 13:52
+3.058E+0 ft/s
+7.234E+2 gal/m
+TOTAL 0004944 gal
NORMAL

6/17/2008 13:53
+3.008E+0 ft/s
+7.115E+2 gal/m
+TOTAL 0005655 gal
NORMAL

6/17/2008 13:54
+3.018E+0 ft/s
+7.139E+2 gal/m
+TOTAL 0006361 gal
NORMAL

6/17/2008 13:55
+2.997E+0 ft/s
+7.089E+2 gal/m
+TOTAL 0007073 gal
NORMAL