

IDAHO DEPARTMENT OF WATER RESOURCES
Water Measurement Program

WATER MEASURING DEVICE CERTIFICATION
(Revised 7/2002)

District Water District 36A
Diversion Name Florence Livestock Spring/Billingsley Creek SP

Inventory Date 7/16/2004
Inventory Examiner J. Berkay
PCC o.k.? NA Yes No

Test Date 7/16/2004
Person performing test J. Berkay
Exam complete? Yes No

| | |
|--------------------|--|
| Name: | _____ |
| Water Right No.: | _____ |
| Legal Description: | T _____ R _____ Sec. _____ * _____ 1/4 _____ 1/4 _____ 1/4 |
| Site Tag No.: | _____ |
| Diversion Name: | _____ |

Current Owner

Name Billingsley Creek SP
Address _____
City _____ St _____ Zip _____

Phone _____
Cell _____
E-mail _____

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

Name Frank Erwin
Address _____
City _____ St _____ Zip _____

Phone _____
Cell _____
E-mail _____

SECTION 1 - Well Site Identification

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 _____

SECTION II – Installed Meter Information

| METER AND MOUNTING PIPE INFORMATION | | | |
|-------------------------------------|---|---|---|
| Motor HP | gravity, pump not used | Volume units | Acre-Feet _____ Gallons _____ Other (specify) _____ |
| Meter Install Date | | Volume multiplier | |
| Manufacturer | Peek Flow Research | Installation location | <input type="checkbox"/> Excel <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Poor |
| Meter Type Model | FL9901 | Pipe material | carbon steel |
| Meter Model Type | | Outside diameter | 16.0 in |
| Serial Number | | Wall thickness | 0.205 ft |
| Size (nominal) | | Inside diameter | |
| Measure Flow Rate? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Amount of straight pipe upstream from meter | ~150 ft inches Pipe Lengths |
| Measurement Units | <input type="checkbox"/> CFS <input checked="" type="checkbox"/> GPM Other (specify) _____ | Amount of straight pipe downstream from meter | 24.0 ft inches Pipe Lengths |
| Flow Rate Multiplier | 1 | Standard Meter Type | <input checked="" type="checkbox"/> Sonic <input type="checkbox"/> Pyg <input type="checkbox"/> Collins <input type="checkbox"/> Hall <input type="checkbox"/> Anub <input type="checkbox"/> Dye/chem <input type="checkbox"/> Other _____ |
| Measure Cumulative Volume? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Standard Meter Confidence | <input type="checkbox"/> Excellent 2% <input checked="" type="checkbox"/> Good 5% <input type="checkbox"/> Fair 10% <input type="checkbox"/> Poor > 10% |

V spacing = 12.84 in
per Frank
S.O. TFP

Multiple Flowmeters

Are multiple flowmeters used to measure diversions from this well? Yes No

If yes, how many? _____
(Attach separate form for each meter checked and/or calibrated.)

Multiple Wells

If this meter measures diversions from multiple wells, list names and locations of other wells:

NA

SECTION III – Certification for Calibration of a Water Measurement Meter

Measurement No. 1 (M₁) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M₂) is the measured rate of flow from the measuring device being used to check the flow for the calibration. This method or device must be accurate to within ± 5% error. Describe below the method and equipment used to perform this measurement.

Percent Difference = $(M_1 - M_2) \div M_2 \times 100 = \pm \%$ (Acceptable is within ± 10%) (equation 1)

Calibration Multiplier = $M_2 \div M_1$ (equation 2)

Is flowmeter installed according to manufacturer's specifications? Yes No Unsure

Describe any apparent problems with installation or operation _____

no apparent problems

Flowmeter accuracy prior to any adjustments: _____ Totalizer reading _____

Flowmeter accuracy after final adjustment: _____ Totalizer reading _____

Flowmeter calibration multiplier: 1.1135

| FLOWMETER ACCURACY CALIBRATION TABLE | | | | | | | |
|--------------------------------------|----------|-----------------|---|------------------------|---|-------------|--------------------------|
| Installed meter (totalizer reading) | Time | Total Gallons | Average Flow Rate GPM (M ₁) | Standard total gallons | Average Flow Rate GPM (M ₂) | % diff. (±) | Comments and adjustments |
| | | 3653 | | | | | |
| 3653.724 | 09:22:00 | | | | | | |
| 3653.773 | 09:34:00 | | | | | | |
| 3653.806 | 09:42:00 | 0.0820 AF | 1335.9 | 29750 | 1487.5 | -10.2% | |
| | | 26717.8 gal | | | | | |
| | | | | | | | |
| | | | | | | | |

Notes – Comments – Calculations: _____

There is a pump across road, along w/ a HPP turbine that used to be used on this system. Now the pump is bypassed & the system is all gravity flow

0.082 AF
4 3/4 sec
3571.9 ft³
26718 gal

Note
09:22
on my watch
~~09:20~~
15 09:17
on TFP

| WATER LEVEL DATA | |
|---|---|
| Does the well have access to measure water levels? <input type="checkbox"/> Yes <input type="checkbox"/> No (check one) NA/Spring | |
| Is this well part of USGS, IDWR, or another network of water level monitoring wells? <input type="checkbox"/> Yes <input type="checkbox"/> No (check one) | |
| Static Water Level _____ ft Date _____ | Pumping Water Level _____ ft (at condition _____) Date _____ |

Sketch and/or photograph of installation:

| DATE | TIME | WATER LEVEL (ft) | WIND DIRECTION | WIND SPEED | WAVE DIRECTION | WAVE PERIOD | WAVE HEIGHT | WAVE TYPE | WAVE STATE | WAVE PERIOD | WAVE HEIGHT | WAVE TYPE | WAVE STATE |
|------|------|------------------|----------------|------------|----------------|-------------|-------------|-----------|------------|-------------|-------------|-----------|------------|
| | | | | | | | | | | | | | |

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 *Jeff Perry* Date 7/16/2004
 (person performing measurements)

07-16 09:5400 *1
 + 001.70 % 012
 0587.8 MMSEC
 100.90 % 70

Florence LS Spring

OUTER DIAMETER
 16.0000 IN

PIPE MATERIAL
 ? CS.SS

WALL THICKNESS
 0.2051 IN

INNER LINING
 ? NO LING.

- KIND OF FLUID
 ? WATER

KIND OF FLUID
 ? WATER

SENSOR MOUNTING
 ?

TYPE OF SENSOR
 ? SMALL

SPACING
 12.940 IN U

07-16 09:0400 *R
 +001.70 % 012

0587.8 MMSEC
 100.90 % 70

09:17+152.163E 16PM 00R
 +00000 *10 G 00R
 -00000 *10 G 00R

09:18+148.728E 16PM 00R
 +00147 *10 G 00R
 -00000 *10 G 00R

09:19+147.936E 16PM 00R
 +00296 *10 G 00R
 -00000 *10 G 00R

09:20+148.200E 16PM 00R
 +00444 *10 G 00R
 -00000 *10 G 00R

09:21+150.313E 16PM 00R
 +00593 *10 G 00R
 -00000 *10 G 00R

09:22+147.936E 16PM 00R
 +00741 *10 G 00R
 -00000 *10 G 00R

09:23+150.049E 16PM 00R
 +00890 *10 G 00R

09:38+151.634E 16PM 00R
 +03125 *10 G 00R
 -00000 *10 G 00R
 09:37+150.042E 16PM 00R
 +02925 *10 G 00R
 -00000 *10 G 00R
 09:36+150.513E 16PM 00R
 +02827 *10 G 00R
 -00000 *10 G 00R
 09:35+148.728E 16PM 00R
 +02677 *10 G 00R
 -00000 *10 G 00R
 09:34+148.728E 16PM 00R
 +02529 *10 G 00R
 -00000 *10 G 00R
 09:33+150.049E 16PM 00R
 +02380 *10 G 00R
 -00000 *10 G 00R
 09:32+150.049E 16PM 00R
 +02231 *10 G 00R
 -00000 *10 G 00R
 09:31+147.936E 16PM 00R
 +02082 *10 G 00R
 -00000 *10 G 00R
 09:30+148.728E 16PM 00R
 +01934 *10 G 00R
 -00000 *10 G 00R
 09:29+148.464E 16PM 00R
 +01786 *10 G 00R
 -00000 *10 G 00R
 09:28+149.521E 16PM 00R
 +01637 *10 G 00R
 -00000 *10 G 00R
 09:27+148.728E 16PM 00R
 +01488 *10 G 00R
 -00000 *10 G 00R
 09:26+153.219E 16PM 00R
 +01338 *10 G 00R
 -00000 *10 G 00R
 09:25+147.936E 16PM 00R
 +01189 *10 G 00R
 -00000 *10 G 00R
 09:24+150.049E 16PM 00R
 +01040 *10 G 00R
 -00000 *10 G 00R

Handwritten mark