410045

WMP2 7-23-02

IDAHO DEPARTMENT OF WATER RESOURCES
Water Measurement Program

WATER MEASURING DEVICE CERTIFICATION

(Revised 7/2002)

District UD 36A

Diversion Name Big Springs Pipeline

Inventory Date	Test Date 7/13/04
Inventory Examiner	Person performing test C. Knowles / G. Lemmon
PCC o.k.? ☐ Yes ☐ No	Exam complete? ☐ Yes ☐ No

Name: Big Springs Water Users Assoc.
Water Right No.:
Legal Description: T____ R____ Sec.____ ____¼ ____¼ ____¼
Site Tag No.:
Diversion Name:

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 ____

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		Volume units	Acre-Feet Gallons Other (specify) _____
Meter Install Date		Volume multiplier	
Manufacturer		Installation location	☐ Excel ☐ Fair ☐ Good ☐ Poor
Meter Type		Pipe material	CS
Meter Model		Outside diameter	30.04
Serial Number		Wall thickness	.189
Size (nominal)		Inside diameter	29.66
Measure Flow Rate?	☐ Yes ☐ No	Amount of straight pipe upstream from meter	_____ Inches 10+ Pipe Lengths
Measurement Units	☐ CFS ☐ GPM Other (specify)_____	Amount of straight pipe downstream from meter	_____ Inches 10+ Pipe Lengths
Flow Rate Multiplier		Standard Meter Type	☒Sonic ☐Pyg ☐Collins ☐Hall ☐Anub ☐Dye/chem ☐Other _____
Measure Cumulative Volume?	☐ Yes ☐ No	Standard Meter Confidence	☐ Excellent 2% ☒ Good 5% ☐ Fair 10% ☐ Poor > 10%

Fuji meas.

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:

_____

_____

_____

_____

SECTION III – Certification for Calibration of a Water Measurement Meter

Measurement No. 1 (M_1) is the measured rate of flow from the permanently installed flow meter.

Measurement No. 2 (M_2) 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) ÷ M_2 × 100 = ± % (Acceptable is within ± 10%) (equation 1)

Calibration Multiplier = M_2 ÷ M_1 (equation 2)

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

Describe any apparent problems with installation or operation _____

_____

_____

Flowmeter accuracy prior to any adjustments: _____ Totalizer reading _____

Flowmeter accuracy after final adjustment: _____ Totalizer reading _____

Flowmeter calibration multiplier: _____

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
		6,175		~~5750.2~~	~~5750.2~~	~~17.4~~	
				5730.8	~~5730.8~~ 5730.8	+7.8	

Notes – Comments – Calculations: Pitot tube used to measure Rate

Read difference w/ manometer

3.5" of Head diff.

13.76 cfs

$h = 3.5" = 0.292$ ft $d_i = 29.66$ in $= 2.47$ ft

$Q = 0.65 A\sqrt{2gh} = 0.65 \frac{\pi (2.47)^2}{4} \sqrt{2(32.2)(0.292)} = 13.5$ cfs

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 (*check one*)	
Static Water Level _____ ft Date _____	Pumping Water Level _____ ft (at condition _____) Date _____

Sketch and/or photograph of installation:

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)

Big Springs Water Users Assoc.
START :07-13 16:38
END :07-13 16:48
INTERVAL:00:01:00

7/13/2004 16:38
+2.645E+0 ft/s
+5.697E+3 gal/m
+TOTAL 0000000 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:39
+2.644E+0 ft/s
+5.695E+3 gal/m
+TOTAL 0005590 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:40
+2.642E+0 ft/s
+5.690E+3 gal/m
+TOTAL 0011282 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:41
+2.657E+0 ft/s
+5.723E+3 gal/m
+TOTAL 0017019 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:42
+2.687E+0 ft/s
+5.787E+3 gal/m
+TOTAL 0022836 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:43
+2.705E+0 ft/s
+5.826E+3 gal/m
+TOTAL 0028560 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:44
+2.671E+0 ft/s
+5.754E+3 gal/m
+TOTAL 0034265 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:45
+2.743E+0 ft/s
+5.909E+3 gal/m
+TOTAL 0040050 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:46
+2.659E+0 ft/s
+5.728E+3 gal/m
+TOTAL 0045812 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:47
+2.663E+0 ft/s
+5.737E+3 gal/m
+TOTAL 0051569 gal
-TOTAL 0000000 gal
NORMAL

7/13/2004 16:48
+2.694E+0 ft/s
+5.804E+3 gal/m
+TOTAL 0057308 gal
-TOTAL 0000000 gal
NORMAL

12.81 CFS Meas.