

IDAHO DEPARTMENT OF WATER RESOURCES  
Water Measurement Program

**WATER MEASURING DEVICE CERTIFICATION**

(Revised 7/2002)

District 36A

Diversion Name Ruby Springs

Inventory Date _____
Inventory Examiner _____
PCC o.k.? <input type="checkbox"/> Yes <input type="checkbox"/> No

Test Date <u>8-11-04</u>
Person performing test <u>Citnards</u>
Exam complete? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Name: <u>Norwood Subdivision</u>	<i>Needs Follow up on meter Replaced</i>
Water Right No.: _____	
Legal Description: <u>T 07S R 13E Sec. 13 NE 1/4 NE 1/4 NE 1/4</u>	
Site Tag No.: <u>40010019</u>	
Diversion Name: <u>Ruby Springs</u>	

**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	<i>1/1A</i>	Volume units	<input checked="" type="checkbox"/> Acre-Feet Other (specify) _____
Meter Install Date		Volume multiplier	<i>.001</i>
Manufacturer	<i>Mcrometer</i>	Installation location	<input type="checkbox"/> Excel <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Poor
Meter Type	<i>Propeller</i>	Pipe material	<i>CS</i>
Meter Model		Outside diameter	<i>8.68</i>
Serial Number	<i>84-8-420</i>	Wall thickness	<i>.365</i>
Size (nominal)	<i>8"</i>	Inside diameter	
Measure Flow Rate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Amount of straight pipe upstream from meter	<i>10'</i> _____ Inches Pipe Lengths
Measurement Units	<input checked="" type="checkbox"/> CFS <input type="checkbox"/> GPM Other (specify) _____	Amount of straight pipe downstream from meter	<i>✓</i> _____ Inches Pipe Lengths
Flow Rate Multiplier	<i>X1</i>	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 checked="" type="checkbox"/> Excellent 2% <input type="checkbox"/> Good 5% <input type="checkbox"/> Fair 10% <input type="checkbox"/> Poor > 10%

**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<sub>1</sub>)** is the measured rate of flow from the permanently installed flow meter.

**Measurement No. 2 (M<sub>2</sub>)** 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 \_\_\_\_\_

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 <sub>1</sub> )	Standard total gallons	Average Flow Rate GPM (M <sub>2</sub> )	% diff. (±)	Comments and adjustments
105684	START	1303.4	115.45	7939	198.48	-9.83%	
105688	11.29 min						

Notes – Comments – Calculations: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WATER LEVEL DATA	
Does the well have access to measure water levels?    ~ Yes    ~ No    ( <i>check one</i> )	
Is this well part of USGS, IDWR, or another network of water level monitoring wells?    ~ Yes    ~ No    ( <i>check one</i> )	
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 \_\_\_\_\_

*Caldwell*

Date \_\_\_\_\_

*8-11-04*

(person performing measurements)

Nowood

Sub tool/0019

OUTER DIAMETER  
8.6799 IN

PIPE MATERIAL  
? CS,SS

WALL THICKNESS  
0.3248 IN

SPACING  
6.729 IN U

0303.7 MMSEC  
101.21 % TO

14:50+196.544E 0GPM 00R  
+ 1.246E 0FPS 00R  
*START* +00000 \*G 00R  
-00000 \*G 00R

08-11 14:5000 \*R  
+002.60 % AI2

14:51+196.544E 0GPM 00R  
+ 1.246E 0FPS 00R  
+00197 \*G 00R  
-00000 \*G 00R

14:52+197.600E 0GPM 00R  
+ 1.253E 0FPS 00R  
+00390 \*G 00R  
-00000 \*G 00R

14:53+205.525E 0GPM 00R  
+ 1.302E 0FPS 00R  
+00593 \*G 00R  
-00000 \*G 00R

14:54+190.996E 0GPM 00R  
+ 1.210E 0FPS 00R  
+00790 \*G 00R  
-00000 \*G 00R

14:55+175.938E 0GPM 00R  
+ 1.115E 0FPS 00R  
+00985 \*G 00R  
-00000 \*G 00R

14:56+184.127E 0GPM 00R  
+ 1.167E 0FPS 00R  
+01179 \*G 00R  
-00000 \*G 00R

14:57+192.053E 0GPM 00R  
+ 1.217E 0FPS 00R  
+01374 \*G 00R  
-00000 \*G 00R

14:58+195.223E 0GPM 00R  
+ 1.236E 0FPS 00R  
+01569 \*G 00R  
-00000 \*G 00R

14:59+197.072E 0GPM 00R  
+ 1.250E 0FPS 00R  
+01768 \*G 00R  
-00000 \*G 00R

15:00+198.657E 0GPM 00R  
+ 1.259E 0FPS 00R  
+01970 \*G 00R  
-00000 \*G 00R

15:01+205.525E 0GPM 00R  
+ 1.302E 0FPS 00R  
+02171 \*G 00R  
-00000 \*G 00R

15:02+203.940E 0GPM 00R  
+ 1.292E 0FPS 00R  
+02370 \*G 00R  
-00000 \*G 00R

15:03+198.129E 0GPM 00R  
+ 1.256E 0FPS 00R  
+02566 \*G 00R  
-00000 \*G 00R

15:04+200.770E 0GPM 00R  
+ 1.272E 0FPS 00R  
+02766 \*G 00R  
-00000 \*G 00R

15:05+198.129E 0GPM 00R  
+ 1.256E 0FPS 00R  
+02961 \*G 00R  
-00000 \*G 00R

15:06+196.015E 0GPM 00R  
+ 1.243E 0FPS 00R  
+03159 \*G 00R  
-00000 \*G 00R

15:07+198.129E 0GPM 00R  
+ 1.256E 0FPS 00R  
+03357 \*G 00R  
-00000 \*G 00R

15:08+195.223E 0GPM 00R  
+ 1.236E 0FPS 00R  
+03557 \*G 00R  
-00000 \*G 00R

15:09+198.657E 0GPM 00R  
+ 1.259E 0FPS 00R  
+03758 \*G 00R  
-00000 \*G 00R

15:10+201.827E 0GPM 00R  
+ 1.279E 0FPS 00R  
+03961 \*G 00R  
-00000 \*G 00R

15:11+196.015E 0GPM 00R  
+ 1.243E 0FPS 00R  
+04159 \*G 00R  
-00000 \*G 00R

15:12+198.129E 0GPM 00R  
+ 1.256E 0FPS 00R  
+04357 \*G 00R  
-00000 \*G 00R

15:13+198.129E 0GPM 00R  
+ 1.256E 0FPS 00R  
+04552 \*G 00R  
-00000 \*G 00R

15:14+186.241E 0GPM 00R  
+ 1.181E 0FPS 00R  
+04750 \*G 00R  
-00000 \*G 00R

15:15+192.053E 0GPM 00R  
+ 1.217E 0FPS 00R  
+04947 \*G 00R  
-00000 \*G 00R

15:16+203.940E 0GPM 00R  
+ 1.292E 0FPS 00R  
+05144 \*G 00R  
-00000 \*G 00R

15:17+195.223E 0GPM 00R  
+ 1.236E 0FPS 00R  
+05341 \*G 00R

15:18+198.657E 0GPM 00R  
+ 1.259E 0FPS 00R  
+05538 \*G 00R  
-00000 \*G 00R

15:19+185.184E 0GPM 00R  
+ 1.174E 0FPS 00R  
+05735 \*G 00R  
-00000 \*G 00R

15:20+192.053E 0GPM 00R  
+ 1.217E 0FPS 00R  
+05934 \*G 00R  
-00000 \*G 00R

15:21+192.053E 0GPM 00R  
+ 1.217E 0FPS 00R  
+06131 \*G 00R  
-00000 \*G 00R

15:22+201.827E 0GPM 00R  
+ 1.279E 0FPS 00R  
+06330 \*G 00R  
-00000 \*G 00R

15:23+192.053E 0GPM 00R  
+ 1.217E 0FPS 00R  
+06529 \*G 00R  
-00000 \*G 00R

15:24+199.185E 0GPM 00R  
+ 1.263E 0FPS 00R  
+06725 \*G 00R  
-00000 \*G 00R

15:25+215.300E 0GPM 00R  
+ 1.364E 0FPS 00R  
+06924 \*G 00R  
-00000 \*G 00R

15:26+211.601E 0GPM 00R  
+ 1.341E 0FPS 00R  
+07127 \*G 00R  
-00000 \*G 00R

15:27+207.639E 0GPM 00R  
+ 1.315E 0FPS 00R  
+07332 \*G 00R  
-00000 \*G 00R

15:28+199.185E 0GPM 00R  
+ 1.263E 0FPS 00R  
+07540 \*G 00R  
-00000 \*G 00R

15:29+205.525E 0GPM 00R  
+ 1.302E 0FPS 00R  
+07741 \*G 00R  
-00000 \*G 00R

15:30+201.827E 0GPM 00R  
+ 1.279E 0FPS 00R  
+07939 \*G 00R  
-00000 \*G 00R

*40 min run*

*198.400 GPM*