



State of Idaho

DEPARTMENT OF WATER RESOURCES

1341 Fillmore Street, Suite 200, Twin Falls ID 83301-3380

Phone: (208) 736-3033 FAX: (208) 736-3037

SOUTHERN REGION

DIRK KEMPTHORNE  
Governor

KARL J. DREHER  
Director

July 18, 2005

David Funk  
3040 N 3800 E  
Hansen, ID 83334  
CERTIFIED MAIL

Re: Measuring Device Certification

Dear Mr. Funk,

On June 4, 2003, the Idaho Department of Water Resources ("IDWR") issued an order requiring installation of measuring devices and lockable controlling works on diversions from Rock Creek.

On July 12, 2005 IDWR employees, Troy Winward and Corbin Knowles, measured the flow on the "Funk Spud Cellar Diversion" (site tag A0004165) with IDWR's certified Fuji Ultrasonic Flow meter as requested by the watermaster of Water District 47-O. The shunt meter that is currently installed at the site (Master Meter SLV8") measured 46% below the IDWR certified flow meter measurement. Thus, the meter does not meet IDWR's accuracy standard of  $\pm 10\%$  of certified meter reading. The measurement of the diversion must be remedied by August 18, 2005.

Pursuant to Section 42-701, Idaho Code, users who neglect to comply with any provision of Department orders requiring installation of measuring devices and lockable controlling works may be subject to the administrative enforcement actions provided by Section 42-1701B, Idaho code. Enforcement actions may include the issuance of Notices of Violation and Cease and Desist Orders, as well as possible civil penalties.

Enclosed is a copy of the order requiring measurement devices and lockable controlling works on diversions from Rock Creek and a copy of IDWR's standards for open channel and closed conduit measurement devices. Measurement devices must meet IDWR's standards. An impeller or propeller type meter may be the most economical meter replacement, however there may be other measurement options including open channel measurement devices (e.g. flume or weir) depending upon diversion characteristics. Please contact Corbin Knowles or myself at 208-736-3033 if you have any questions regarding potential measurement options.

Sincerely,

Troy Winward  
E.I.T., Southern Region Water Distribution

**U.S. Postal Service  
CERTIFIED MAIL RECEIPT  
(Domestic Mail Only. No Insurance Coverage Provided)**

7002 0460 0000 7276 5185

HANSEN, ID 83334

Postage	\$ 37.60
Certified Fee	230.30
Return Receipt Fee (Endorsement Required)	175.75
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 443.65

UNIT ID: 0372  
Postmark  
Clerk: KKNFYD  
07/18/05

Sent To David Funk  
Street, Apt. No., or PO Box No. 3040 N 3800 E  
City, State, ZIP+4 Hansen ID 83334  
PS Form 3800, January 2001 See Reverse for Instructions

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:  
David Funk  
3040 N 3800 E  
Hansen ID 83334

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Addressee  
X David Funk  
B. Received by (Printed Name) DAVID FUNK  
C. Date of Delivery 7/20/05  
D. Is delivery address different from item 1?  Yes  No  
If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.  
4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number (Transfer from service label) 7002 0460 0000 7276 5185

PS Form 3811, August 2001 Domestic Return Receipt 102595-01-M-0381

UNITED STATES POSTAL SERVICE

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JUL 21 2005



First-Class Mail  
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Permit No. G-10

• Sender, please print your name, address, and ZIP+4 in this box.  
IDAHO DEPARTMENT OF WATER RESOURCES  
1341 FILLMORE STREET, SUITE 200  
TWIN FALLS, ID 83301-3380  
HANSEN ID 83334  
JUL 20 2005  
USPS

40004165  
Fund Rock Creek

OUTER DIAMETER  
2.0098 IN

PIPE MATERIAL  
? CS,SS

WALL THICKNESS  
0.1098 IN

INNER LINING  
? NO LING.

SPACING  
5.810 IN U

0296.8 MMSEC  
101.96 % T0

07-12 10:2600 \*R  
+002.60 % A12

10:35+799.648E 0GPM 00R  
+ 5.383E 0FPS 00R  
+00000 \*G 00R  
-00000 \*G 00R

10:36+776.665E 0GPM 00R  
+ 5.229E 0FPS 00R  
+00787 \*G 00R  
-00000 \*G 00R

10:37+790.402E 0GPM 00R  
+ 5.321E 0FPS 00R  
+01575 \*G 00R  
-00000 \*G 00R

10:38+770.325E 0GPM 00R  
+ 5.187E 0FPS 00R  
+02368 \*G 00R  
-00000 \*G 00R

10:39+833.198E 0GPM 00R  
+ 5.610E 0FPS 00R  
+03164 \*G 00R  
-00000 \*G 00R

10:40+739.153E 0GPM 00R  
+ 4.977E 0FPS 00R  
+03970 \*G 00R  
-00000 \*G 00R

10:41+772.439E 0GPM 00R  
+ 5.200E 0FPS 00R  
+04738 \*G 00R  
-00000 \*G 00R

10:42+781.685E 0GPM 00R  
+ 5.262E 0FPS 00R  
+05511 \*G 00R  
-00000 \*G 00R

10:43+813.305E 0GPM 00R  
+ 5.475E 0FPS 00R  
+06328 \*G 00R  
-00000 \*G 00R

10:44+819.197E 0GPM 00R  
+ 5.515E 0FPS 00R  
+07100 \*G 00R  
-00000 \*G 00R

10:45+821.046E 0GPM 00R  
+ 5.528E 0FPS 00R  
+07899 \*G 00R  
-00000 \*G 00R

10:46+780.620E 0GPM 00R  
+ 5.255E 0FPS 00R  
+08687 \*G 00R  
-00000 \*G 00R

IDAHO DEPARTMENT OF WATER RESOURCES  
Water Measurement Program

**WATER MEASURING DEVICE CERTIFICATION**

(Revised 7/2002)

District \_\_\_\_\_

Diversion Name \_\_\_\_\_

Inventory Date \_\_\_\_\_

Inventory Examiner \_\_\_\_\_

PCC o.k.?       Yes     No

Test Date \_\_\_\_\_

Person performing test \_\_\_\_\_

Exam complete?     Yes     No

Name:	_____
Water Right No.:	_____
Legal Description:	T _____ R _____ Sec. _____ $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$
Site Tag No.:	_____
Diversion Name:	_____

**Current Owner**

Name David Funk

Phone \_\_\_\_\_

Address 3040 N 3800 E

Cell \_\_\_\_\_

City Lansdown St SD Zip 83334

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	15	Volume units	Acre-Feet <u>Gallons</u> Other (specify) _____
Meter Install Date		Volume multiplier	X1000
Manufacturer	MASTER Meter	Installation location	<input type="checkbox"/> Excel <input checked="" type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Poor
Meter Type	Smart	Pipe material	CS
Meter Model	SLV 8"	Outside diameter	8.05
Serial Number	1518102	Wall thickness	.110
Size (nominal)	8"	Inside diameter	
Measure Flow Rate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Amount of straight pipe upstream from meter	_____ Inches _____ Pipe Lengths
Measurement Units	<input type="checkbox"/> CFS <input checked="" type="checkbox"/> GPM Other (specify) _____	Amount of straight pipe downstream from meter	_____ Inches _____ Pipe Lengths
Flow Rate Multiplier	X1	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:

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### 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
289708	START	5000	427.35	2897	789.2	-45.8%	
289707	11.70						

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 \_\_\_\_\_ Date \_\_\_\_\_  
(person performing measurements)