

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 71-10940
Exam Date: 6/10/2016

1. Current Owner:
PATRICK W LEE And/Or JOHN T BROWN
PO BOX 61 SUN VALLEY ID 83353 (208) 774-2900

2. Accompanied by: John T Brown (Jack) & Benny Walker(IDWR staff)

Phone No: 208-774-2303
Address: same as above
Relationship to Permit Holder: Partner

3. **SOURCE:**
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 71-10941(surface water); 71-7178, 71-7179 & 71-10929
2. Other water rights with the same point-of-diversion: 71-7179

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 34, Twp 08N, Rge 14E, B.M. CUSTER County(Rediversion)

GROUND WATER SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 34, Twp 08N, Rge 14E, B.M. CUSTER County(Injection)

GROUND WATER SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 34, Twp 08N, Rge 14E, B.M. CUSTER County

Method of Determination: GPS at time of exam.

2.

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08N	14E	34															X		

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08N	14E	34															11.0	4.0	15.0

Total Acres: 15

Method of Determination: Aerial photography and Jack Brown outlined irrigated acres on a map on 8/16/17.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.
Indicate weir size/pipe as applicable.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be
1:24,000 or greater.

 X Aerial Photo Attached (required for irrigation of 10+ acres).

 X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0043595		5			

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Panametrics	Ultrasonic	PT878		2283		3/24/2008

2. Measurements: A measurement of 58 gpm or 0.13 cfs was conducted by Dan Nelson on 3/24/08 for license 71-7179.
 (58 gpm/ 448.8 = 0.13 cfs)

E. FLOW

_____ Additional Computation Sheets Attached

CALCULATIONS

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (15 \text{ ac}) \times (3 \text{ af/ac}) = 45 \text{ AF}$$

$$V_{DR} = (0.13 \text{ cfs}) \times (184 \text{ days}) \times 1.9835 = 47.4 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 45 \text{ AF}$$

2. Volume Calculations for Other Uses:

Stockwater use on permit for 0.02 cfs is no more than 13,000 gpd and is considered a domestic use per Beneficial Use Examination Rules. No volume required.

G. NARRATIVE/REMARKS/COMMENTS

On June 30, 2011, application for permit was filed for 0.02 cfs for stockwater use and for the diversion of up to 0.3 cfs for irrigation of 15 acres within a 160 acre authorized place of use. The permit was approved on October 28, 2011 and proof was filed on November 1, 2013.

The system consists of a well, a 4 inch pipe that diverts ground water into the old Lost Creek channel. The ground water is then conveyed to the south pond where a 5 HP pump re-lifts to the irrigation system. The irrigation system is made of two 600 ft., 2-inch polyurethane pipes with sprinklers every 40 ft. (see pics) The two individual pipes are connected to two main risers in the pasture and can be pivoted around the risers by hooking to the back of an ATV and pulled from place to place within the 15 acre proposed place of use.

A measurement was conducted by Dan Nelson on the 4 inch discharge pipe on March 24, 2008 for approximately 58 gpm or 0.13 cfs. The IDWR standard for irrigation for this area is 3 ft/ac. The permit is limited to 15 acres within 160 acre permissible place of use. On August 16, 2017 Jack Brown again met with IDWR staff and outlined on a map the approximate 15 acres that have been irrigated. Note that the same approximate 15 acres have continually been irrigated so the 160 acre permissible place of use will not be recommended for licensing. Therefore I am recommending a flow rate of 0.13 cfs and a volume of 45 AF for the irrigation of 15 acres for license 71-10940.

The stock water use is for approximately 10 horses that drink out of the old Lost Channel and the two ponds. This amount of water is calculated at less than 13,000 gpd and considered a domestic use under Beneficial Use Examination Rules which requires no volume. Therefore I am recommending a flow rate of 0.02 cfs with no volume for stockwater use.

A companion license 71-10941 is for surface water from Lost Creek for the same irrigation and stockwater use. A combined limits condition was placed on the permits and should be carried over to the new licenses limiting them to 0.30 cfs with a volume of 45 AF for the irrigation of 15 acres.

Note the Watermaster of 170 granted a variance allowing for the PCC method to continue as measurement for the new license until notified otherwise.(see attached e-mail dated 9/21/17)

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	05/01 to 10/31	0.13 CFS	45.0 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	
<u>Totals:</u>		0.130 CFS	

2. Recommended Amendments

☐ Change P.D. as reflected above
 ☐ Add P.D. as reflected above
 ☒ None
☐ Change P.U. as reflected above
 ☐ Add P.U. as reflected above
 ☐ None

I. AUTHENTICATION

Field Examiner's Name Sana Reeder Date 9/22/17
 Reviewer _____ Date _____

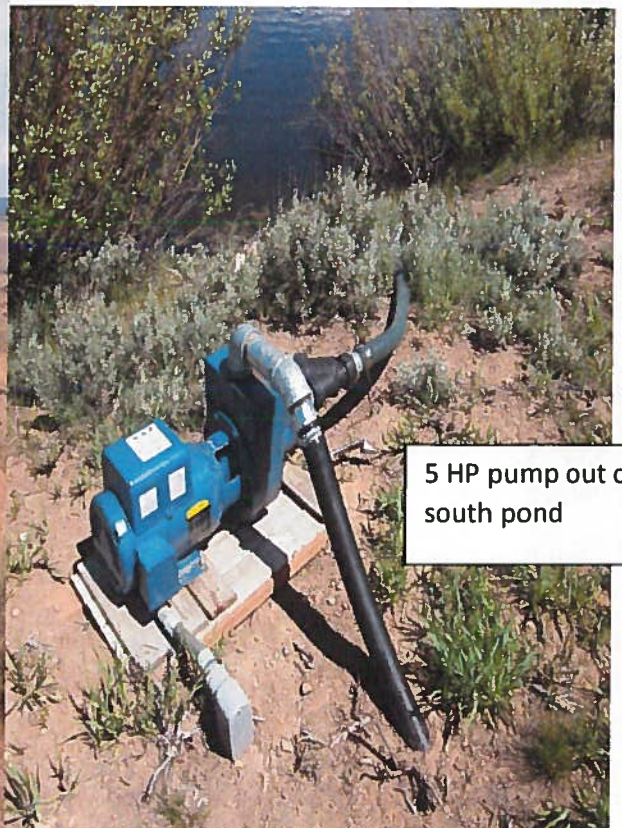
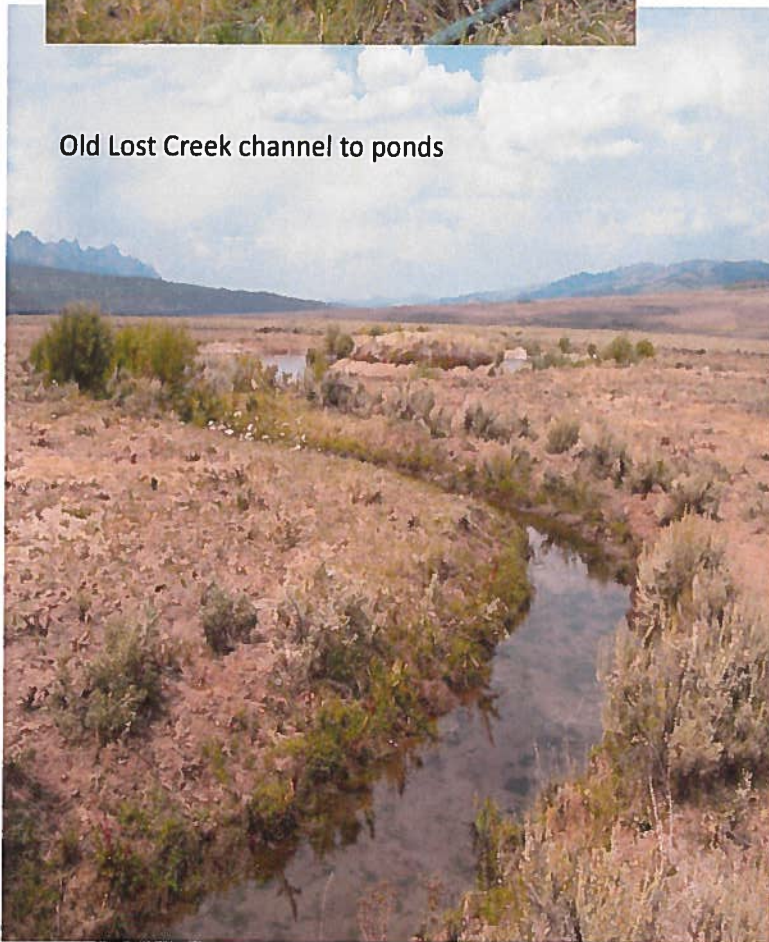
Well head



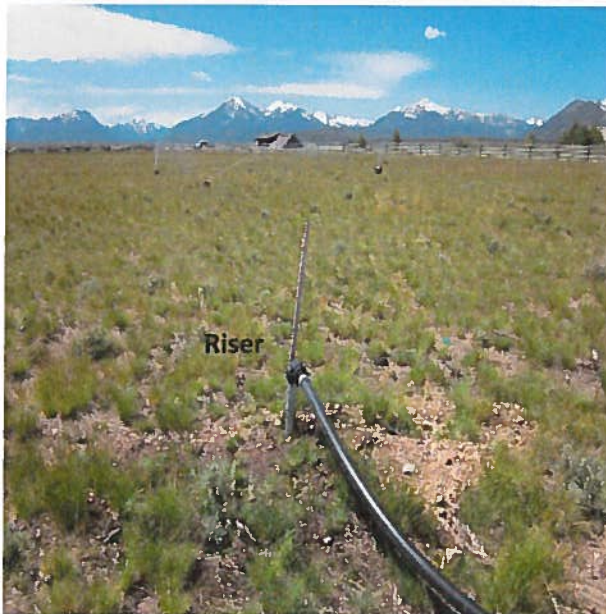
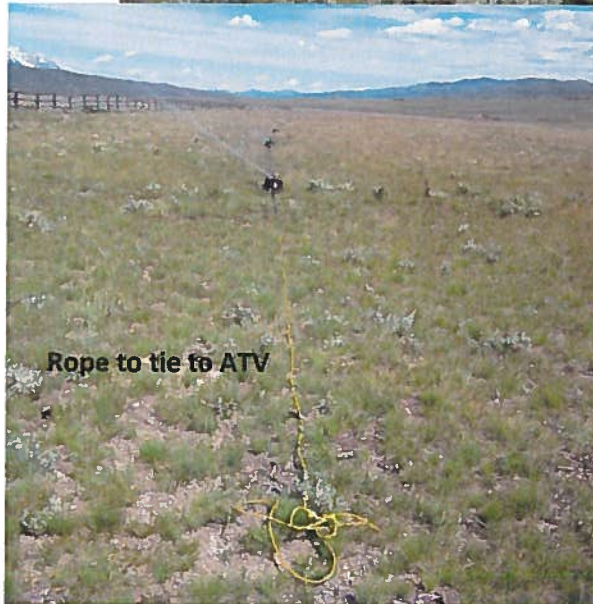
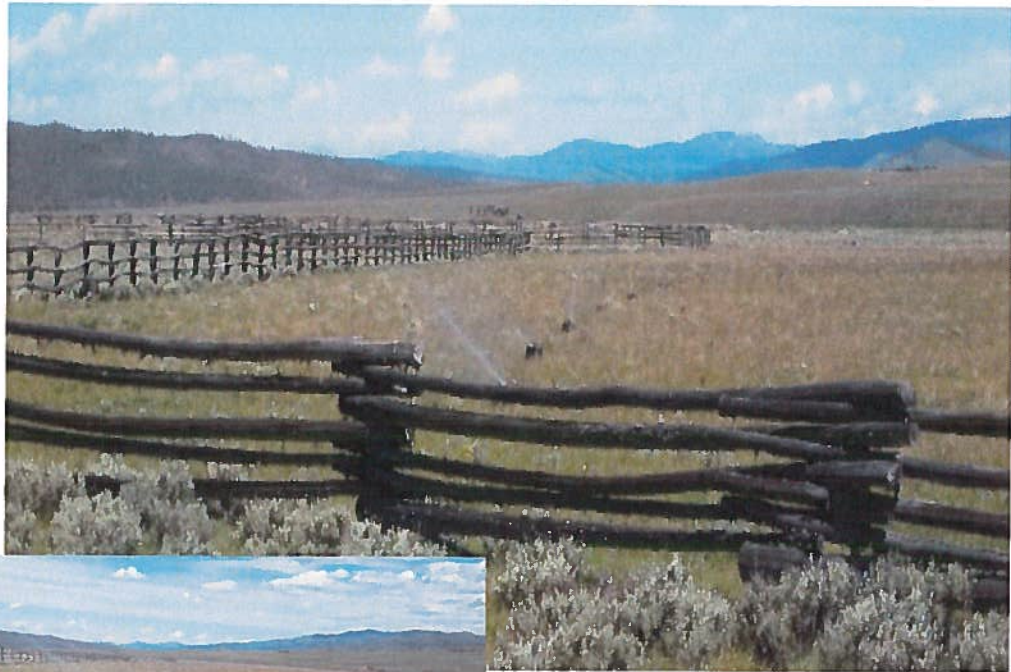
Old Lost Creek channel below injection point



Old Lost Creek channel to ponds



5 HP pump out of south pond





NESE

08N14E

riser

Rediversion out of south pond

SWSE

Injection from Lost Creek

4 inch PVC buried line to south pond

Lost Creek POD

riser

Well

Injection pt.

4 inch PVC buried line to old channel

NOTE 2

3

07N14E

NENE 1

Valley Rd

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8/16/17

Per Jack Brown

Valley Rd

NWSE

NESE

34

08N14E

SWSE

SESE

7000

NWNE 2

3

07N14E

NENE 1

Field Exam 71-10940

The USDA-FSA Aerial Photography Field office asks to be credited in derived products.