

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-22778

Exam Date: 6/21/2012

1. Current Owner: AUBREY SPRING RANCH LLC

~~8836 N HESS ST STE D~~
~~HAYDEN ID 83835~~
~~(208) 762-5534~~

2. Accompanied by: Steve Barnard

Phone No: (650) 644-9516

Address: 130 Treasure Lane, Hailey ID 83333

Relationship to Permit Holder: Current Owner

3. **SOURCE**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: None

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

GROUND WATER

SE1/4SE1/4

Sec. 14, Twp 01S, Rge 19E, B.M.

BLAINE County

Method of Determination: Waypoints were collected with a Garmin GPSmap 60CSx receiver and downloaded into an ArcMap shapefile that corresponds with 2009 and 2011 aerial photography and verified the point of diversion is located as recorded. See attached map.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
01S	19E	14																2.4	2.4

Total Acres: 2.4

Method of Determination: Tracks were collected with a Garmin GPSmap 60CSx receiver and downloaded into an ArcMap shapefile that corresponds with 2009 and 2011 aerial photography and verified the place of use is located as recorded. See attached map.

3. ___x___ 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.

<u>Well or Diversion</u> <u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u> 2.0	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u> <u>Size</u>
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D. FLOW MEASUREMENTS None

E. FLOW CALCULATIONS _____ Additional Computation Sheets Attached

Measured Method:

Theoretical yield:

$$Q = \frac{8.8 \times (Hp) \times (Eff)}{H}$$

Where: Hp = 2 Hp (per Kelly Shannon, former ranch manager)

Eff = efficiency = 70% assumed

H = total head = pumping level = (2.31 x system pressure)

assume pumping level of 120 feet (based on Wood River Drilling Co. records)

assume system pressure = 40 psi

$$H = 120 + (40 \times 2.31) = 212.40$$

$$Q = \frac{8.8 \times 2.0 \times .70}{212.40} = 0.06 \text{ cfs}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.4 \text{ acres} \times 3.5 \text{ afa} = 8.4 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05(200) \times 1.9835 = 19.8 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 8.4 \text{ afa}$$

G. NARRATIVE/REMARKS/COMMENTS

This permit was split from 37-7810.

Application for permit 37-7810 was submitted by Kenneth Hellyer on 12/5/1979. The Permit was assigned to William A. and Laura L. McMahan on 2/3/1982 and then assigned to William McMahan on 7/30/1985. An application for amendment was submitted by Mr. McMahan on 07/14/1992, and proof of beneficial use was submitted on 9/9/1993. Permit was then assigned to Aubrey Springs Ranch LLC on 10/23/1996.

This system was developed from the domestic well serving the western ranch house and not from the irrigation well permitted under 37-7810, but was developed within the acres permitted under that permit. As such, the permit was split in order to license the separate irrigation system developed on the permitted acres. This system operates using a 2.0 Hp pump and delivers irrigation water to 2.4 acres of lawn area surrounding the ranch house and adjacent shop through a pressurized sprinkler system.

Water rights 37-349; 37-348; 37-1071A indicate potential place of use overlap with right. These rights appear to be historical irrigation rights and research indicates none were renumbered or split and/or were claimed in the SRBA.

Theoretical yield equation indicates the well could produce up to 0.06 cfs. 2.4 acres irrigated at 3.5 afa yields 8.4 afa.

Recommend licensing a diversion rate of 0.6 cfs with an annual volume of 8.4 acre feet.

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	04/15 to 10/15	0.060 CFS	8.4 AFA
<u>Totals:</u>		0.060 CFS	8.4 AFA

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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name [Signature] Date 10-22-12
 Reviewer [Signature] Date 1/14/13



Figure 1: Front yard lawn area



Figure 2: Backyard lawn area

State of Idaho
Department of Water Resources
Attachment To Water Right License
37-22778

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

R19E



0 0.025 0.05 0.1 Miles

- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

