

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 72-16701

Exam Date: 9/10/2012

1. Current Owner: ANDREW L JACOBS
521 W 37 S
BLACKFOOT ID 83221
(208)520-3454

And/Or

PEGGY A JACOBS
521 W 37 S
BLACKFOOT ID 83221
(208)520-3454

2. Accompanied by: Jeff Cooper (IDWR) and I met with Penny Wilson who is renting the property from the Jacobs

3. SOURCE

SALMON RIVER

TRIBUTARY

SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 72-10476 (domestic groundwater decree)
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

SALMON RIVER

L6 SE1/4SW1/4

Sec. 28, Twp 11N, Rge 17E, B.M.

CUSTER County

Method of Determination: Aerial photography and field verification

2.

PLACE OF USE: IRRIGATION

Tw	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
11N	17E	28												2.2					2.2
														L 6					

Total Acres: 2.2

Method of Determination: Aerial photography, GIS, and field verification

D. FLOW MEASUREMENTS

Not required for permits with irrigation of less than five (5) acres per new Beneficial Use Examination Rules implemented 3/29/2012.

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

Where: Hp = 2.0 Hp (Hp portion on pump nameplate was unreadable, but Flotec pump model # FP5182-08 is 2.0 Hp per Flotec website)

Eff = 70% (assumed)

H = elevation distance + 2.31 x operating pressure (assume elevation difference of 5.0 feet based on field observation and estimate of pumping height and assumed operating pressure of 45.0 psi).

$$H = 5.0 \text{ feet} + (2.31 \times 45.0 \text{ psi}) = 108.95 \text{ feet}$$

$$Q = \frac{8.8 \times (2.0) \times (0.70)}{108.95}$$

Q = 0.11 cfs Rate exceeds permitted amount of 0.09 cfs,

Field exam and GIS analysis indicates that approximately 2.2 acres of the property are irrigated. Using the IDWR 0.03 cfs per acre standard for irrigation of 5.0 acres or less indicates that 0.07 cfs can be licensed.

E. VOLUME CALCULATIONS

Not required for permits with irrigation using natural stream flow from a stream or spring per new Beneficial Use Examination Rules implemented 3/29/2012.

F. NARRATIVE/REMARKS/COMMENTS

Application for Permit 72-16701 was filed on January 17, 2006 by Andrew L &/or Peggy A Jacobs to appropriate 0.09 cfs of water from the Salmon River for irrigation of 2.8 acres in Custer County. The permit was approved on August 13, 2007 and Proof of Beneficial Use was filed on September 18, 2007. On September 10, 2012, while in the area, Jeff Cooper and I met Penny Wilson who is renting the 72-16701 property from the Jacobs and conduct the licensing exam for the permit. Note that the Jacobs' address and phone number has been changed from what is listed on the permit record based on information obtained from Penny Wilson. This new address also matches the mailing address listed for the Jacobs according to Custer County Assessor's records.

During the exam it was noted that the 72-16701 system, in particular the diversion pump, was in a state of disrepair. However, the pump intake, the pump, several water lines, hoses, and sprinklers were observed during the exam and it appeared that the system may have even irrigated the property earlier in the year. The pump size was not readable on the pump nameplate, but using the brand and model number (Flotec model # FP5182-08) and an internet search, it was determined that the pump was a 2.0 Hp pump according to the Flotec website. Note that the permitted place of use is 2.8 acres, but the IDWR Custer County Tax lot data indicates that the property is only 2.2 acre in size. However, the IDWR Custer County Tax lot data does not appear to actually match the apparent property boundaries. Examination of the Custer County Assessor's Office website indicates that the property is 2.84 acres in size and a copy of a plat map included with the original application for permit filing also indicates that the property is 2.84 acres in size. The property has a home and driveway along with a small shed. There is also a portion of ground within the fenced in area for horses that did not appear to be irrigated. Using GIS and accounting for these non irrigated areas, it is estimated that the irrigation place of use is approximately 2.2 acre in size. A theoretical estimate indicates that the 2.0 hp pump and system could have diverted more than the permitted rate of 0.09 cfs. However, using the IDWR standard of 0.03 cfs per acre for irrigation of 5.0 acres or less and the 2.2 acres of irrigation it appears that 0.07 cfs can be licensed. It is recommended that license 72-16701 be issued for the irrigation of 2.2 acres with a diversion rate of 0.07 cfs.

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

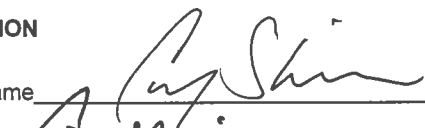
G. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	04/01 to 10/31	0.070 CFS	N/A
<u>Totals:</u>		0.070 CFS	N/A

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

H. AUTHENTICATION

Field Examiner's Name  Date 3/4/2013
Reviewer  Date 3/14/13

72-16701 Point of Diversion Photos

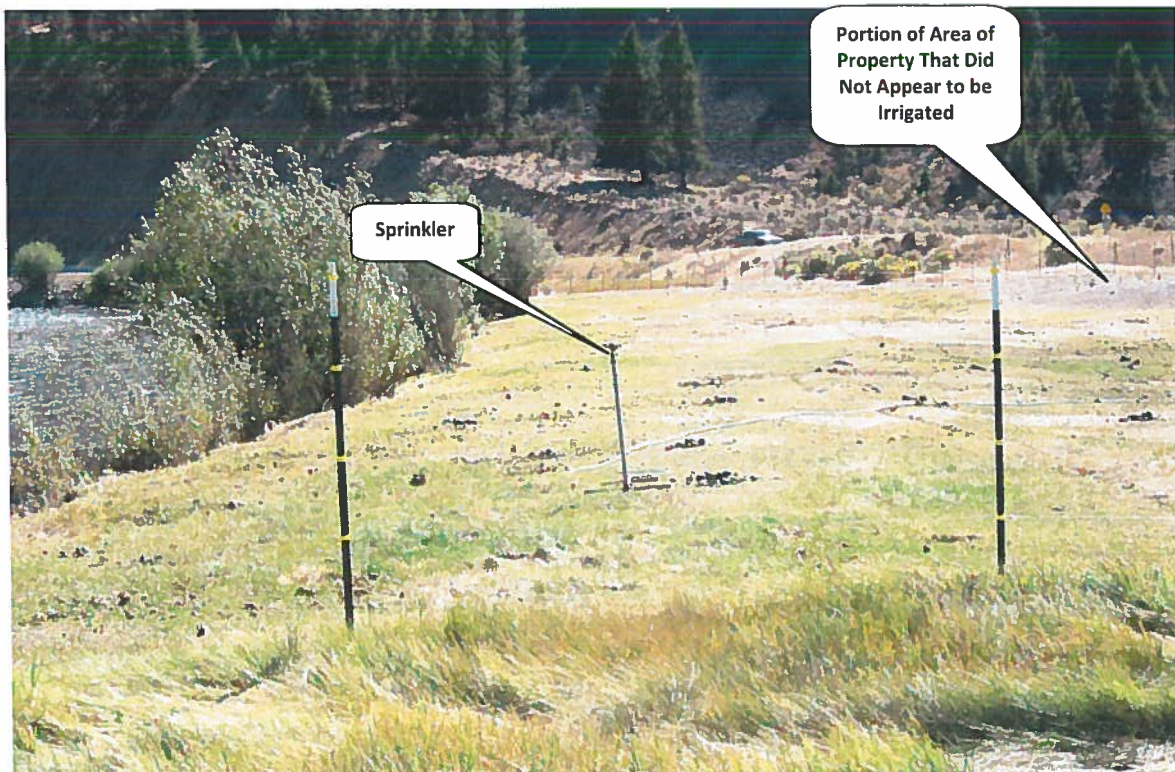


ABOVE: View of pump intake in the Salmon River. Note the screened intake (apparently an attempt to comply with IDF&G fish screen requirements).

BELOW: View of currently inoperable pump (Flotec model # FP5182-08) that diverted water from the Salmon River. The pump size could not be read on the nameplate, but the Flotec website indicated it is a 2.0 Hp pump.



72-16701 Place of Use Photos

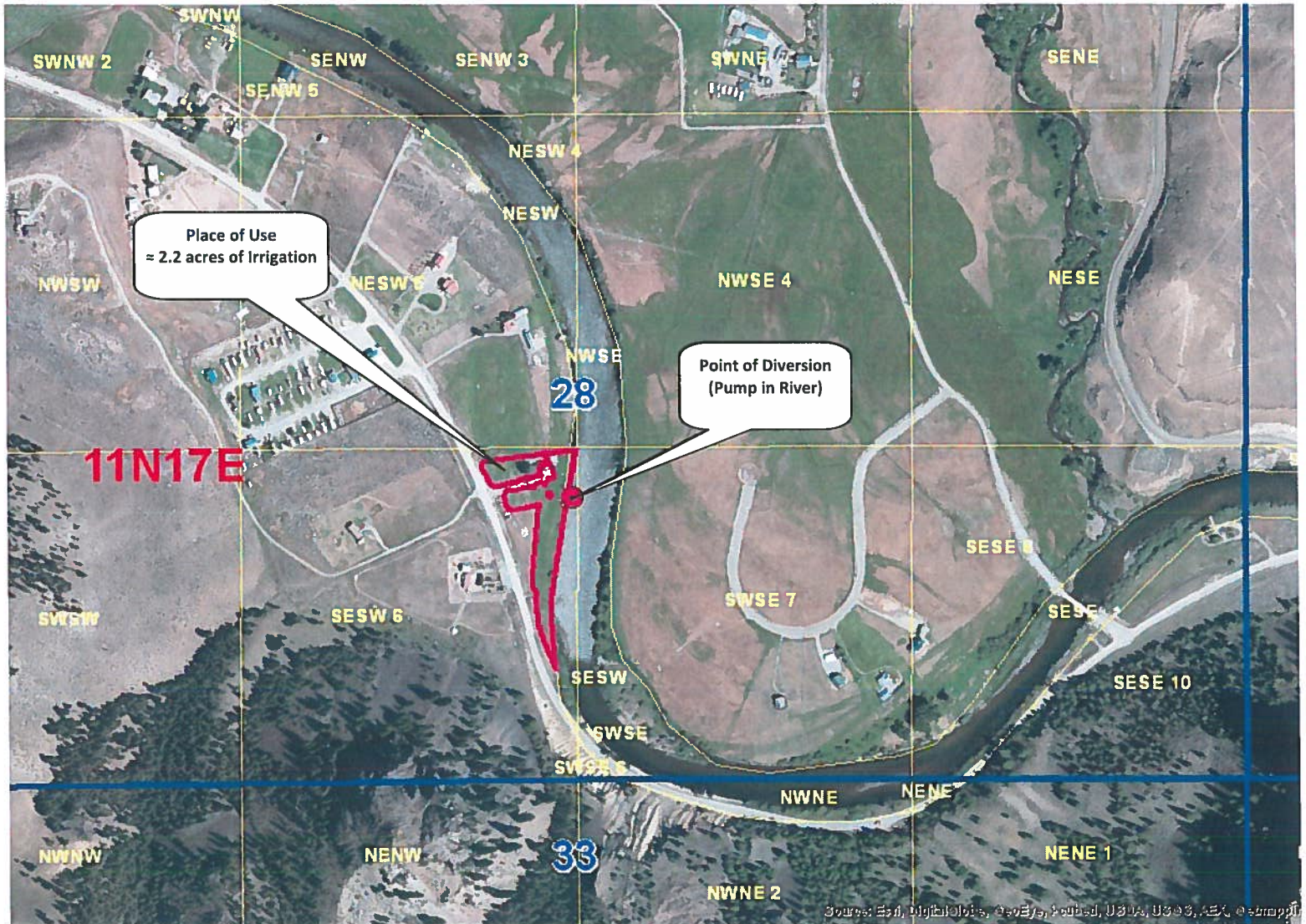


ABOVE: View looking south across the southern portion of the property showing previous irrigation (note sprinkler).

BELOW: View of northern portion of property (near home and outbuilding) showing irrigation.



72-16701 Point of Diversion and Place of Use Map

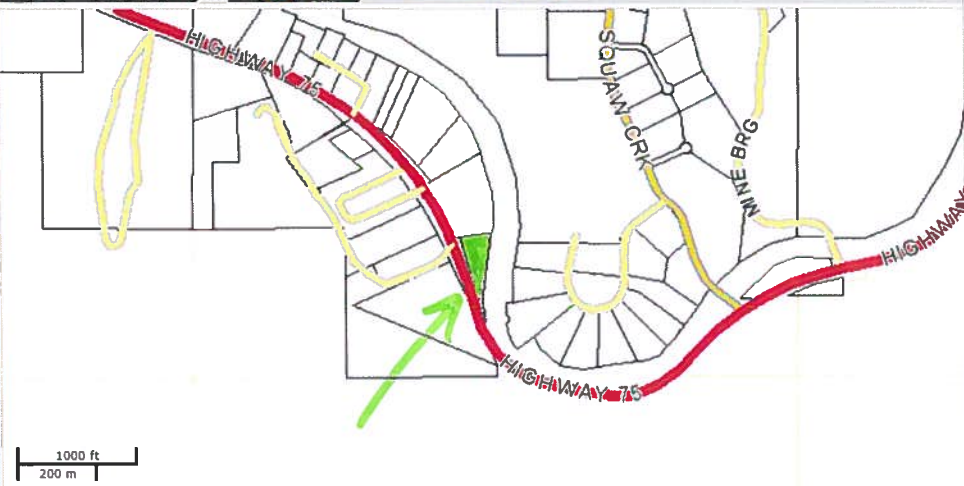


72-16701 Parcel Data Taken From Custer County Assessor's Website

MapServer - Custer County, Idaho - Windows Internet Explorer

Map Search Print Layout Property Detail

Jump To ... link help



1000 ft
200 m

NAD83 / Idaho Central (ftUS)
N: 941637 E: 1518712

Long: -114° 27' 52.1" Lat: 44° 14' 57.9"
Long: -114.4645° Lat: 44.2494°

NAD83 / UTM Zone 11 (meters)
X = 702432 Y = 4902701

Info

Printer friendly [Window](#)

- Parcel: 1 of 1 [Map It](#)
- Pldn: RP11N17E286642 [Detail](#)
- Name: JACOBS, ANDREW L
- Mailing: 521 W 37 S
- Mailing:
- Mailing: BLACKFOOT, ID 83221
- St Address: 21870 HIGHWAY 75
- Legal: TRACT 85-38 TRACT 1664 & 1820 SEC 28 T11N R17E
- Tax Roll Acreage: 2.84
- Tax Code Area: 11000

Done

836 Project
837 Wood River Valley Info

Internet 150%