

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 72-7529

Exam Date: 9/4/2014

1. Current Owner: DANA C HURLESS
HC 67 BOX 621
CLAYTON ID 83227
(208)838-2327

2. Accompanied by: Dana Hurless

3. SOURCE

SALMON RIVER

TRIBUTARY

SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 72-10349 (D&S), 72-4161B Irrigation from French Creek, partial overlap, this water right is not used due to access; it is easier to pump from the river.

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

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

SALMON RIVER

L2 SE1/4SW1/4NW1/4

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

CUSTER County

Method of Determination: GPS 44 15.303/114 28.220

2. PLACE OF USE:

2. PLACE OF USE:			IRRIGATION																Totals
Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
11N	17E	28							1.4				.1						1.5
									L 2										

Total Acres: 1.5

Method of Determination: Field exam and aerial photography

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.
- ☐ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☐ Photo of Diversion and System Attached

4.

<u>Diversion</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
Pump from river		5hp		Aurora	2"

D. FLOW MEASUREMENTS
E. FLOW CALCULATIONS

A pitot tube was used to measure the pressure of sprinkler heads on a set of hand line in the pasture. There were a total of 7 sprinkler heads.

Using equation: $Q(\text{gpm}) = 30.0 \times D(\text{in})^2 \times P(\text{psi})^{0.5}$

Where:

D(in)	P(psi)	Q(gpm)
11/64	27	4.6
11/64	25	4.4
11/64	23	4.2
11/64	21	4.1
11/64	19	3.9
11/64	17	3.6
11/64	15	3.4
Total(gpm) =		28.3

$28.3 \text{ gpm} / 448.83 \text{ gpm/cfs} = 0.06 \text{ cfs}$

Permitted flow rate = **0.04 cfs**

Recommended flow = **0.04 cfs**

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: *Volume was calculated however not included on license because the source is surface water.*

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.5 \text{ acres} \times 3.5 \text{ AFA} = 5.3 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 17.0 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 5.3 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS

Water right permit 72-7529 is an irrigation water right from the Salmon River. A pump and irrigation system has been installed to irrigate 1.5 acres. During the licensing exam it was found that the permit POU did not cover the entire irrigated area, an Application for Amendment was filed by the owner to correct the POU. Because of the overlapping domestic groundwater right (72-10349), a condition was added to limit the two water rights to 1.5 acres of irrigation.

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	04/01 to 10/31	0.040 CFS	
<u>Totals:</u>		0.040 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name Nathan E. L. Date 9/14/15

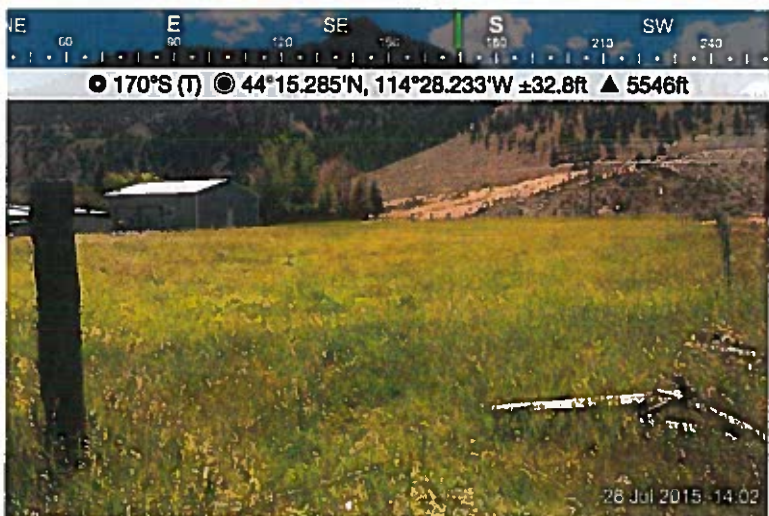
Reviewer _____ Date _____



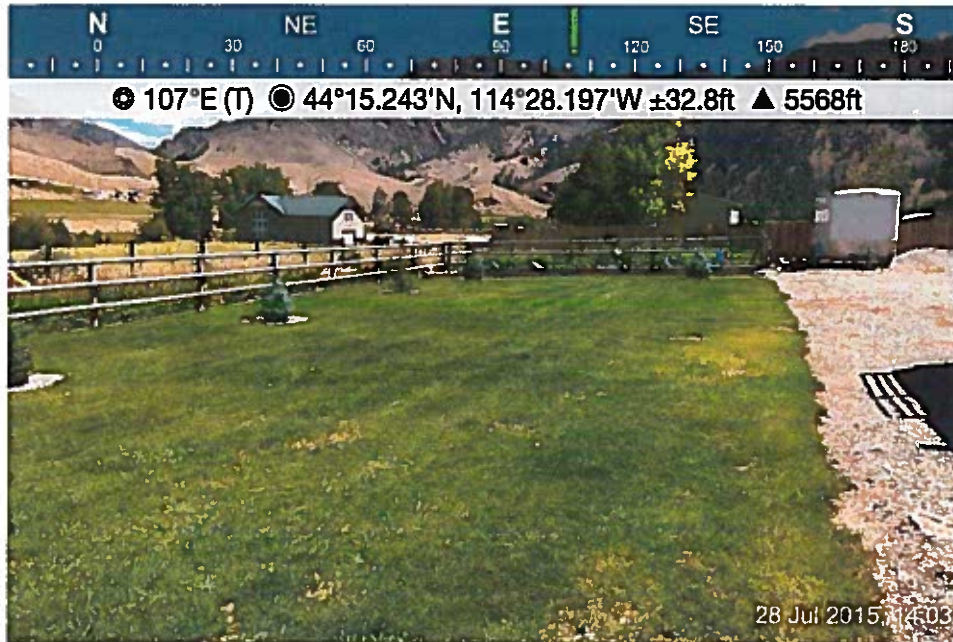
Picture 1 – Point of diversion from Salmon River.



Picture 2 – Pump on bank of Salmon River.



Picture 3 – View of irrigated pasture looking towards house and shop.



Picture 4 – Lawn and garden.



Picture 5 – Looking toward house from road.

State of Idaho
Department of Water Resources
Water Right License
72-7529
Location and size of water lines



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters
- 2 inch line
- 1 1/4 inch line

0 0.0125 0.025 0.05 Miles



WATER RIGHT LICENSE
72-7529