

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 72-7547
Exam Date: 07/25/2019

1. Current Owner:

MICKY ROSKELLEY
HC 67 BOX 2051
CHALLIS ID 83226

2. Accompanied by: Micky Roskelley

Phone No: 208-949-1328

Address: same as above

Relationship to permit Holder: Permit holder

3. **SOURCE:**

GROUND WATER

Method of Determination: Permit holder pointed out well near well house.**B. OVERLAP REVIEW**

1. Other water rights with the same place of use:

Water Right No.	Source	Purpose of Use	Basis
72-10348	Ground water	Stockwater, domestic	Decree

Comments: Right 72-7547 is the only irrigation right appurtenant to this property.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**GROUND WATER SW $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 28, Twp 13N, Rge 19E, B.M. CUSTER County

Method of Determination: ArcMap aerial imagery, site visit.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
13N	19E	28							8.0	5.6		0.4							14.0

Total Acres: 14.0

Method of Determination: ArcMap aerial imagery, Google Earth aerial imagery, site visit.

3.

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

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Irrigation well		7.5			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	Ultrasonic	GE	PT878			March 2019

2. Measurements: I had the permit holder run as many lines as he could, so he ran 2 hand lines on the west side of the driveway and one on the east side. I could measure the west side flow on a pipe in the well house but I had to measure the east side flow on the hand line before the sprinklers. The line in the well house was steel and the hand line was aluminum. The diagnostics were all within reasonable ranges.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: I ran the test for several minutes and the highest observed flow on the west side was 88.2 gpm, while the highest east side flow was 71.7 gpm, for a total of 159.9 gpm, or 0.36 cfs. Since the irrigated acreage was only 14.0 acres, the maximum allowed flow rate is $14.0 \times 0.02 = 0.28$ cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 14.0 \times 3.5 = 49.9 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.28 \text{ cfs} \times 214 \text{ days in irrigation season} \times 1.9835 \text{ AF/day} = 118.9 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 49.9 \text{ AF}$$

2. Volume Calculations for Other Uses: NA

G. NARRATIVE/REMARKS/COMMENTS

The field exam for permit 72-7547 was conducted on July 25, 2019 with permit holder Micky Roskelley present. The irrigation well is located on the south end of his property and water is transported to four irrigated areas via underground main line. Most of the land is irrigated with handlines, but Mr. Roskelley does have one K-Line irrigation line on his property with sixteen pods. In studying past aerial imagery, I was able to confirm 14.0 acres of irrigation on the property, not including the ½ acre of landscaping and lawn surrounding his home, which is irrigated with his separate domestic well (72-10248). At 0.02 cfs/acre, this translates into a flow rate of **0.28 cfs**. The allowed volume at that acreage is calculated at 14.0 acres x 3.5 AF/acre (standard field headgate requirement in the area) = **49.0 AF**. These are the recommended amounts for licensing.

The well was drilled under a domestic drilling permit, but it appears that the upgrade fee of \$125.00 was paid in May of 2000. The season of use was changed from 4/15 – 10/15 to 4/01 - 10/31 to conform to present IDWR standards.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	4/01 to 10/31	0.28 CFS	49.0 AF
<u>Totals:</u>		0.28 CFS	49.0 AF

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 Jim Bitzenburg Date 7-29-19

Jim Bitzenburg - Senior Water Resource Agent, Southern Region

Reviewer _____ Date _____



POD- irrigation well on Roskelley property.

Sprinkler irrigation on Roskelley property.



72-7547 Roskelley

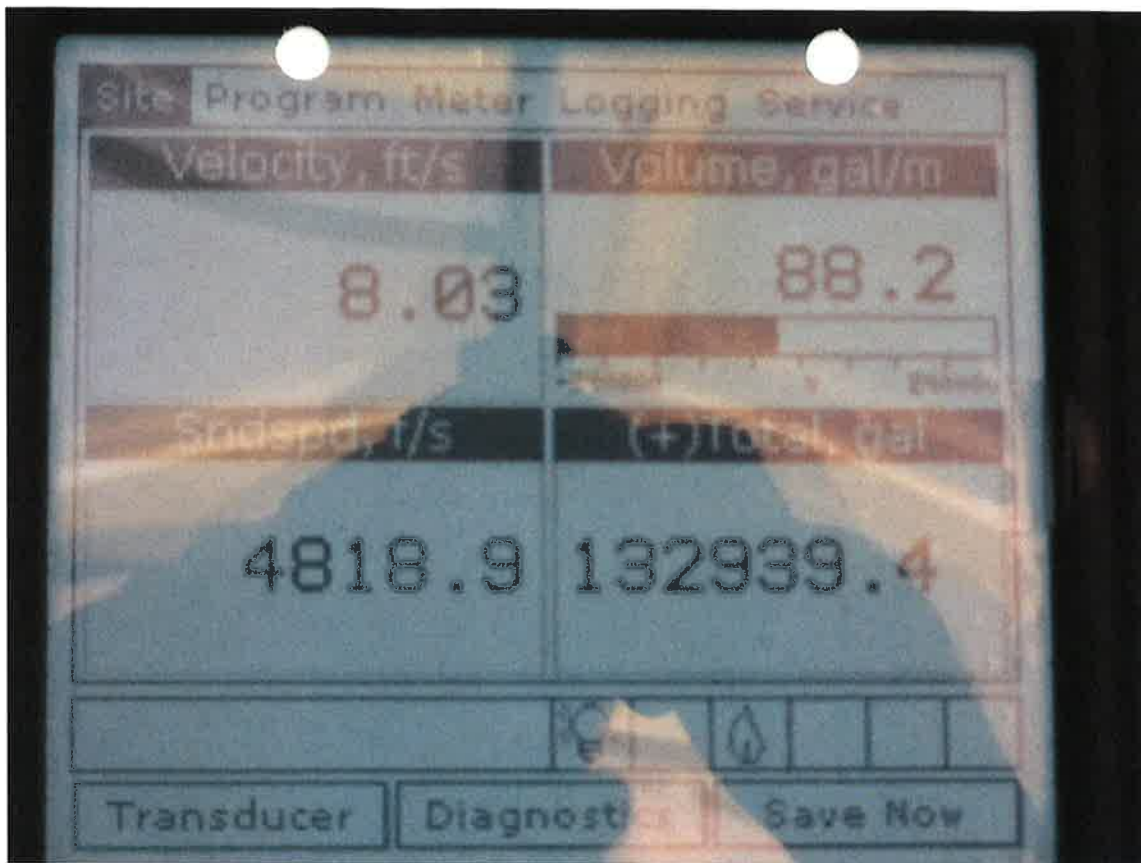


Hand lines on the Roskelley pasture/hayfield.

Sprinkler irrigation occurring on the Roskelley property.

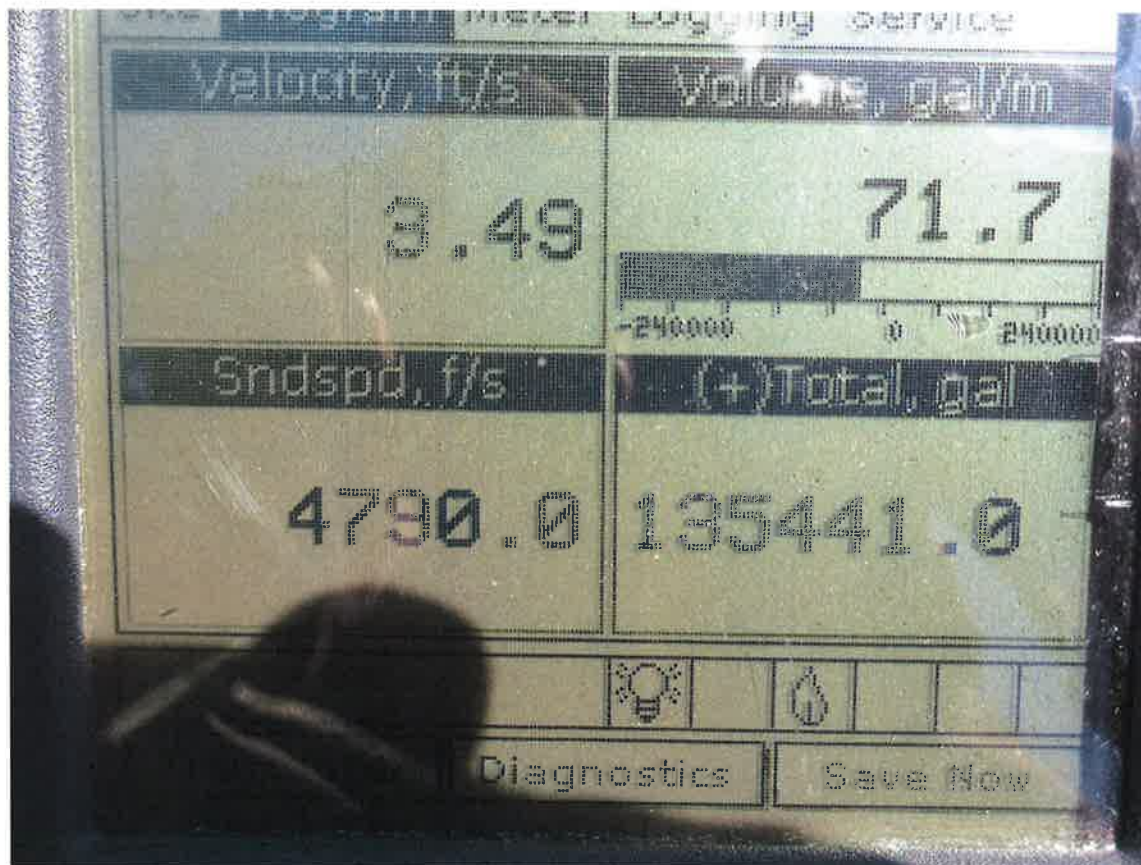


72-7547 Roskelley



Flowmeter reading from pipe serving west pasture.

Flowmeter reading from hand line on east pasture.

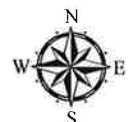


72-7547 Roskelley - System Diagram, POU/POD map



Legend

- Township/Range
- Sections
- QQ
- Place of Use



0 0.05 0.1 0.2 Miles