

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9382

Exam Date: 5/28/2013

1. Current Owner: DIANE VANIMAN
1758 ELMIRA ROAD
SANDPOINT ID 83864
(208)255-5781

2. Accompanied by: This was an "In-House Field Examination." Narrative of the system was obtained from notes on the application for permit, and from a 5/28/2013 phone conversation with Diane Vaniman. Doug Vaniman is deceased, and a copy of the death certificate was submitted with the proof of beneficial use. For this reason, Doug Vaniman was removed as the current owner on the field examination report, and will be removed as the current owner on the license.

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None. Water right 96-4521 is located in the same QQ, but this is for property located to the east and south of water right 96-9382, and is owned by a different individual.
2. Other water rights with the same point of diversion: None. There are two points of diversion that are associated with water right 96-9382 (the 8 inch casing with a submersible pump, and an emergency only irrigation hand pump well).

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

GROUND WATER NE1/4NE1/4 Sec. 15, Twp 59N, Rge 01W, B.M. BONNER County

GROUND WATER NE1/4NE1/4 Sec. 15, Twp 59N, Rge 01W, B.M. BONNER County

Method of Determination: Confirmed by maps submitted with the application for permit, and maps submitted by Diane Vaniman with the proof of beneficial use form, and 2011 ArcMap and esri Imagery.

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>	
59N	01W	15	2.1																2.1

Total Acres: 2.1

Method of Determination: Confirmed by maps submitted with the application for permit, and maps submitted by Diane Vaniman with the proof of beneficial use form, and 2011 ArcMap and esri Imagery.

3. _____ 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).

_____ Photo of Diversion and System Attached

4.

Well or Diversion

<u>ID No.*</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>
(1)	8 inch casing	submersible	unknown	unknown	unknown
(2)	emergency irrigation hand-pump well				unknown

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

D. FLOW MEASUREMENTS

1. Measurements:

(a) Well Log Pump Test: 8.0 gpm X 0.00223 = 0.02 cfs

(b) Theoretical: Hp unknown, so could not do a theoretical.

(c) U of I Nozzle Conversion: 45 psi, (2) 1/8 inch nozzles at 1 time on the pasture; [(2)X3.13 gpm] X 0.00223 = 0.0137

(d) Pipe Conversion: 3/4 inch line for the drip system to unknown number of 1/8 - 1/4 inch emitters;

$$Q = 5 \times 3.1416 \times R\text{-squared} = 0.0153 \text{ cfs}$$

(e) C + D run at the same time = 0.029 = 0.03 cfs

RECOMMEND: 0.03 cfs (which works for this acreage, since the drip system is utilized for the orchard and berry patches).

E. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (2.1 \text{ Acres Irrigated}) \times (3.0 \text{ Irrigation Requirement}) = 6.3 \text{ af}$$

$$V_{D.R.} = [0.03 \text{ Diversion Rate (cfs)}] \times (214 \text{ Days in Irrigation season}) \times 1.9835 = 12.7 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 6.3 \text{ af}$$

F. NARRATIVE/REMARKS/COMMENTS

This was an in-office field examination, with information obtained from the application for permit, and via a 5/28/2013 phone conversation with Diane Vaniman. The system consists of a well 96-94-N-461, 8 inch casing, 250 ft deep, 60 ft static, drilled 12/9/1994 by Hester Well Drilling Inc No. 528. There is an unknown Hp submersible pump, and unknown size discharge to risers where 5/8 inch hoses are attached with (2) 1/8 inch rainbird nozzles attached that are moved around the pasture. In the vegetable garden there is a 5/8 inch hose with misc size nozzles; in the orchard and berry gardens, there are 3/4 inch lines with 1/8 - 1/4 inch emitters (unknown number run at one time). The system runs at 45 psi. There is also a hand-pump 96-84-N-11, which is only used in the event of an extended power outage, which is located not far from the submersible well. The hand-pump is only used for emergency irrigation purposes (Diane Vaniman did not have any information about the discharge size or the diversion rate from this hand pump well. Diane said they had not had to use the hand pump since it had been installed).

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	0.030 CFS	6.30 AF
<u>Totals:</u>		0.030 CFS	6.30 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 ☐ Other**H. AUTHENTICATION** Field Examiner's Name
 Date 5/28/2013

SWSE

SESE

10

NWNE

NENE

15

59N01W