

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 13-7567

Exam Date: 9/17/2014

1. Current Owner: HIGH DESERT ENTERPRISES LLC
2150 OLD HORNET RD
COUNCIL ID 83612
(208)599-3409

2. Accompanied by: Terry Andrade

Phone No:

Address:

Relationship to Permit Holder: General Partner

3. SOURCE

SPRINGS

TRIBUTARY

SINKS

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 SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

SPRINGS	NW1/4SW1/4	Sec. 27,	Twp 13S,	Rge 40E, B.M.
FRANKLIN County				
SPRINGS	NW1/4SW1/4	Sec. 27,	Twp 13S,	Rge 40E, B.M.
FRANKLIN County				

Method of Determination: GPS location taken at each of two spring boxes.

2.

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
13S	40E	27											X						

Method of Determination: GPS location taken at stock trough.

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.

Well or Diversion
ID No.*

Motor Make**Hp****Motor Serial No.****Pump Make**

Pump Serial No. or Discharge
Size

2 spring boxes

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

D. FLOW MEASUREMENTS

1.

Measurement
Equipment

Type**Make****Model No.****Serial No.****Size****Calib. Date**

2. Measurements:

E. FLOW CALCULATIONS X Additional Computation Sheets Attached

Measured Method: See attached Hazen-Williams calculations.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

A field exam was needed in order to determine the location of the point of diversion and place of use because this was not evident based on the aerial photography alone. The system consists of two redwood spring boxes which collect water from two springs that are very close to each other. The water is then conveyed to an 880 gallon tire trough via 60 feet of 1.5 inch pipe. The elevation difference between the springs and the trough was about 20 feet. At the time of the exam, the spring was barely flowing due to silt in the spring boxes and low seasonal flows. This right is used in conjunction with 12 other rights for the same herd of 1000 range cattle.

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

H. RECOMMENDATIONS

1. Recommended Amounts

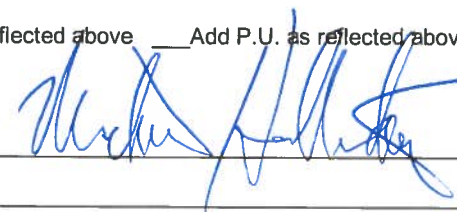
<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER	03/01 to 11/01	0.140 CFS	
<u>Totals:</u>		0.140 CFS	

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  Date 10/7/2014

Reviewer _____ Date _____

Hazen-Williams Equation for Closed Pipe Flow

Assumptions: Head Loss due to bends, couplings, & valves is negligible

$$Q_{cfs} = 1.318 C_h (\pi D^2/4) \times (D/4)^{0.63} \times (H/L)^{0.54}$$

Q = Discharge (cfs)

D = Pipe Diameter (ft) = 0.125 ft

L = Pipe Length (ft) = 60 ft

H = Elevation Drop (ft) = 20 ft

C_h = Values for Types of Pipe = ~~150~~ 140

150 -Plastic (PVC) > 6"

140 -Very Smooth, PVC < 6"

130 -Cast Iron

120 -Wood, Concrete,
Welded Steel

110 -Riveted Steel

100 -Old Cast Iron

80 -Badly Corroded Cast Iron

$$Q_{cfs} = 1.318 (\overset{C_h}{140}) [\pi (\overset{D}{0.125})^2 / 4] \times (\overset{D}{0.125} / 4)^{0.63} \times (\overset{H}{20} / \overset{L}{60})^{0.54}$$

$$Q_{cfs} = \underline{0.14} \text{ cfs}$$

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2 SPRINGS

880 GAL TROUGH
(POU)

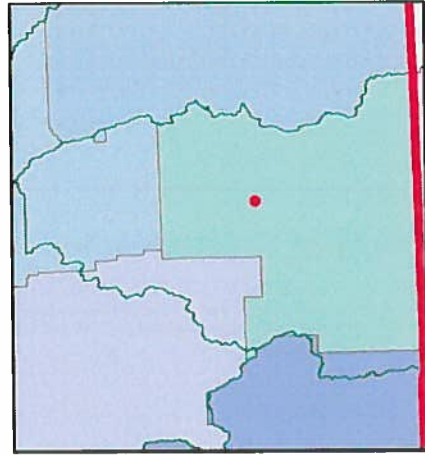




Idaho Department of Water Resources

Water Right
13-7567
(STOCKWATER)

- Point of Diversion
- Place of Use
- State Outline
- Townships
- PLS Sections
- Quarter Quarters



Franklin County
IDWR Basin 13
 Prepared by Holliday, Michael

