

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-13950

Exam Date: 5/31/2013

1. Current Owner: MELEA HILEMAN
56 ANDERSON CREEK RD
GARDEN VALLEY ID 83622
(208)462-3571

AND/OR

WARREN HILEMAN
56 ANDERSON CREEK RD
GARDEN VALLEY ID 83622
(208)462-3571

2. Accompanied by: Warren Hileman

Phone No: Same

Address: Same

Relationship to Permit Holder:

3. SOURCE

SPRING

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 SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

SPRING

L3 NW1/4NW1/4SW1/4

Sec. 14, Twp 09N, Rge 04E, B.M.

BOISE County

Method of Determination: Arc Map (Aerial Photo)

2.

PLACE OF USE: STOCK WATER

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
09N	04E	14											X						
													L 3						

Method of Determination: Arc Map (Aerial Photo)

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>Well or Diversion 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>
N/A	N/A		N/A	N/A	1"

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
5-Gallon Bucket						

2. Measurements: 5- Gallon Bucket. Measured flow of 3 gpm (0.01 cfs).

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: (5-Gallon Bucket & Continuity Equation (theoretical))

$$Q(5\text{-Gallon Bucket}) = 3 \text{ gpm} \sim 0.01 \text{ cfs}$$

$$Q = VA \text{ (theoretical)} = 3 \text{ ft/sec} \times 0.006 \text{ ft}^2 = 0.018 \text{ cfs} \sim 0.02 \text{ cfs}$$

$$Q(\text{measured}) = 0.01 \text{ cfs} < 0.02 \text{ cfs } Q(\text{theoretical}) = 0.02 \text{ cfs } Q(\text{permit})$$

$$A = 0.006 \text{ ft}^2$$

$$V = 3 \text{ ft/sec (Assumed)}$$

Although the measured flow of 0.01 cfs was less than the permit diversion rate of 0.02 cfs, the theoretical flow capacity of the 1" PVC supply line is approximately 0.02 cfs. Due to the low water conditions, it is anticipated that the measured flow is lower than during a normal water year. Therefore, recommend the permit diversion rate of 0.02 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: (Stock Water – 6 Horses and 2 Head of Cattle)

$$V_r = (8 \times 12 \text{ gpd} \times 365 \text{ days}) / 325,850 \text{ gallons/AF} = 0.10 \text{ AFA}$$

$$V_d = 0.02 \times 365 \text{ days} \times 1.9835 = 14.5 \text{ AFA}$$

$$V_r < V_d \quad \text{Recommended Volume of 0.10 AFA}$$

G. NARRATIVE/REMARKS/COMMENTS**WATER SUPPLY SYSTEM:**

Spring water is captured in a buried spring box (barrel) and discharged through approximately 440 lineal feet of 1" PVC pipe to a frost free hydrant near the corner of a small structure. A hose is attached to the frost free hydrant to fill a large tire watering trough. The watering trough provides water for six (6) horses and two (2) head of cattle.

A stock water storage pond, as indicated on the permit with a storage volume of 0.50 AF, was never constructed by the right holder. Likewise, an irrigation system to irrigate 5.0 acres of pasture land was never developed. Therefore, the irrigation, stock water storage, and stock water from storage beneficial uses cannot be licensed under Water Right Permit No. 65-13950.

OVERLAP ANALYSIS:

Point of Diversion & Place of Use: There are no overlaps for the point of diversion or the place of use for Water Right Permit No. 65-13950.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.17	&/or	0.50
Beneficial Use Limit	0.17	&/or	N/A
System Measurement	0.01	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.02	&/or	N/A

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER	1/01 to 12/31	0.020 CFS	0.10 AFA
	<u>Totals:</u>	0.020 CFS	0.10 AFA

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 Rick Collingwood Date 10/10/13

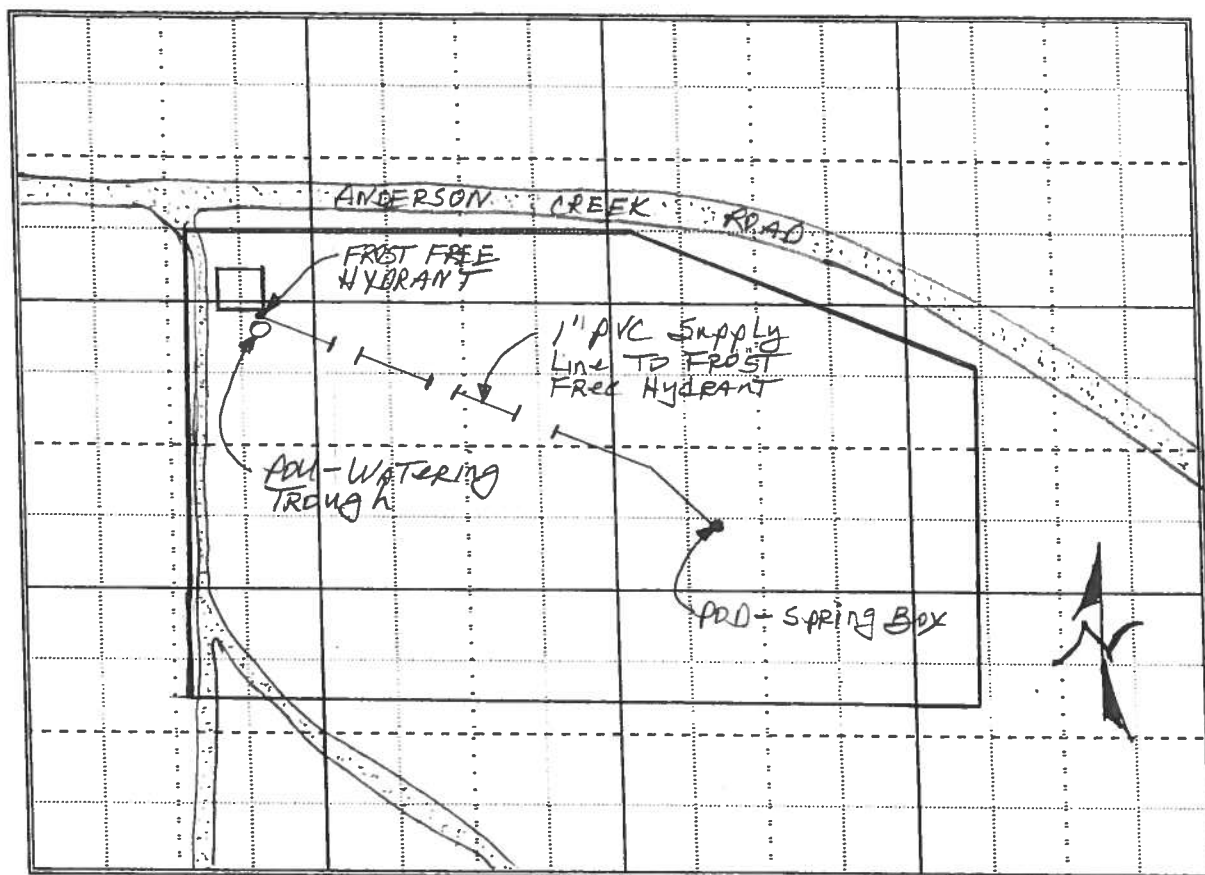
Reviewer _____ Date _____

65-13950
GOV'T. LOT 3

ESRI AERIAL PHOTO - 2012



3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.



Scale: 1" = NTS

- ☐ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

FIELD EXAM PHOTOS

Water Right Permit: 65-13950

Field Exam Date: 5-31-13

PLS: NW1/4, SW1/4 Section 14, T.09N, R.04E.

Field Examiner: RC



Point of Diversion: View southerly of the spring area. The right holder installed a barrel spring box in the spring area to collect the spring water. Water is diverted to a frost free hydrant through approximately 440 feet of 1" PVC pipe to fill a watering trough.



View northwesterly from the spring area of the general pipeline alignment to a frost free hydrant near a watering trough. The watering trough is located near the structure shown in the photo.



Place of Use: View of the frost free hydrant and the watering trough for the right holder's livestock.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

May 15, 2013

Warren & Melea Hileman
56 Anderson Creek Road
Garden Valley, ID 83622

RE: Scheduling Field Exam for Water Right Permit No. 65-13950

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of May 27, 2013**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal operating conditions during the examination. The permit authorizes the diversion of 0.17 cfs of water from a spring for irrigation of 5.0 acres, stock water for 8 head of livestock, and 0.50 AF of stock water storage.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by May 24, 2013, to conduct the exam during the week of May 27, 2013.** If there is a problem with scheduling or conducting the examination at this time, please let me know so we can reschedule or make other arrangements.

I appreciate your attention to this matter and I look forward to hearing from you.

Sincerely,

Rick Collingwood, P.E.
Water Resource Agent, Sr.