

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22884

Exam Date: 9/13/2012

1. Current Owner: NORMAN & ANTOINETTE CAVANAUGH
300 HARRIS CREEK RD
HORSESHOE BEND ID 83629
(208)793-3775

2. Accompanied by: Antoinette Cavanaugh

Phone No: Same

Address: Same

Relationship to Permit Holder: Same

3. **SOURCE**

UNNAMED STREAM

TRIBUTARY

SHAHER CREEK

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:**

UNNAMED STREAM

SW1/4NW1/4

Sec. 12, Twp 06N, Rge 02E, B.M.

BOISE County

Method of Determination: GPS, Bing (2011) Aerial Photo, and Boise County taxlot data.

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>	
06N	02E	12							0.1										0.1

Total Acres: 0.1

Method of Determination: Bing (2011) Aerial Photography w/ field verification.

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.***

N/A

Motor Make**Hp****Motor Serial No.****Pump Make****Pump Serial No. or Discharge Size**

N/A – gravity system no motor or pump

D. FLOW MEASUREMENTS1. Measurement Equipment

<u>Equipment</u>	<u>Type</u>	<u>MakeModel No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
5 Gallon Bucket & Stop watch	N/A	N/A	N/A	N/A	N/A

2. Measurements: 1 Gallon in: #1 = 37.8 sec
#2 = 42.2 sec

⇒ Owner estimated maximum output from system during spring time is approximately 2x current discharge rate.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: 5 Gallon Bucket:

1 Gallon in {avg time [(37.8 + 42.2)/2]} 40.0 sec

$Q = (1 \text{ gal}/40.0 \text{ sec}) \times (60 \text{ sec}/1 \text{ min}) = 1.5 \text{ gpm} \times 1 \text{ cfs}/448.8 \text{ gpm} = \mathbf{0.003 \text{ cfs}} \Rightarrow \mathbf{0.01 \text{ cfs}}$ (min. recognized WR rate)

Measured Method: Maximum Flow Estimation (spring season):

$Q = 0.003 \text{ cfs} \times 2 = 0.006 \text{ cfs} \Rightarrow \mathbf{0.01 \text{ cfs}}$ (min. recognized WR rate)

Diversion rate based on flow estimation(s) = **0.01 cfs**

Permitted Rate = **0.11 cfs**

Beneficial Use Limit = 0.01 ac $\times$ 0.03 cfs/ac = **0.003 cfs** $\Rightarrow$ **0.01 cfs** (min. recognized WR rate)

Proof of Beneficial Use fee paid = \$50.00 = up to **0.20 cfs**

Recommend Flow Estimation(s) Rate = 0.01 cfs

F. VOLUME CALCULATIONS

- Volume Calculations for Irrigation: **N/A for irrigation from stream.**
- Volume Calculations for Other Uses: **N/A - no other uses permitted.**

G. NARRATIVE/REMARKS/COMMENTS**SYSTEM DESCRIPTION:**

Gravity system consists of an unimproved spring (on Ken Renfro's property adjacent to Cavanaugh's property) discharges to an unnamed stream pooled and drained through pipe to connection for up to 3 garden hoses, of which only 1 hose is used to water a garden. Lawn is irrigated with ground water from the well.

P/D LOCATION:

GPS location collected during field exam (N43° 52.4676' W116° 10.5108' Garmin model GPSmap 76 Datum NAD 83) put P/D approximately 18 ft from the property line on Renfro's property according to Boise Co. taxlot data. Mrs. Cavanaugh indicated during the exam that the diversion works were on her property. Due to steepness of terrain it makes sense aerial imagery may not align 100% with taxlot data. Also, 18 ft is within the GPS unit's location accuracy margin of error. P/D shape created near property line, but on Cavanaugh's property. Recommend retaining condition 004, just to make sure right holder is fully informed the right does not grant access across the property of another.

COMPLIANCE WITH PERMIT CONDITIONS:

Permit conditioned that a measuring device and lockable controlling works is to be installed and maintained on the diverting works. No measuring or lockable device(s) currently in place on the diversion. Spring discharge, if left undiverted, may ultimately reach Shafer Creek, but contribution would be too small to quantify let alone regulate in the grand scheme of Water District 65. Watermaster Ron Shurtleff WD 65 recommended measuring and lockable device(s) condition(s) be modified to require installation upon future notification.

Have conditions of permit approval been met? Yes X No – Modifications of measurement and lockable device(s) condition(s) as discussed above approvable per phone conversation with watermaster 10/23/12. All other conditions met.

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/15 to 10/31	0.01 CFS	N/A
	<u>Totals:</u>	0.01 CFS	N/A

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

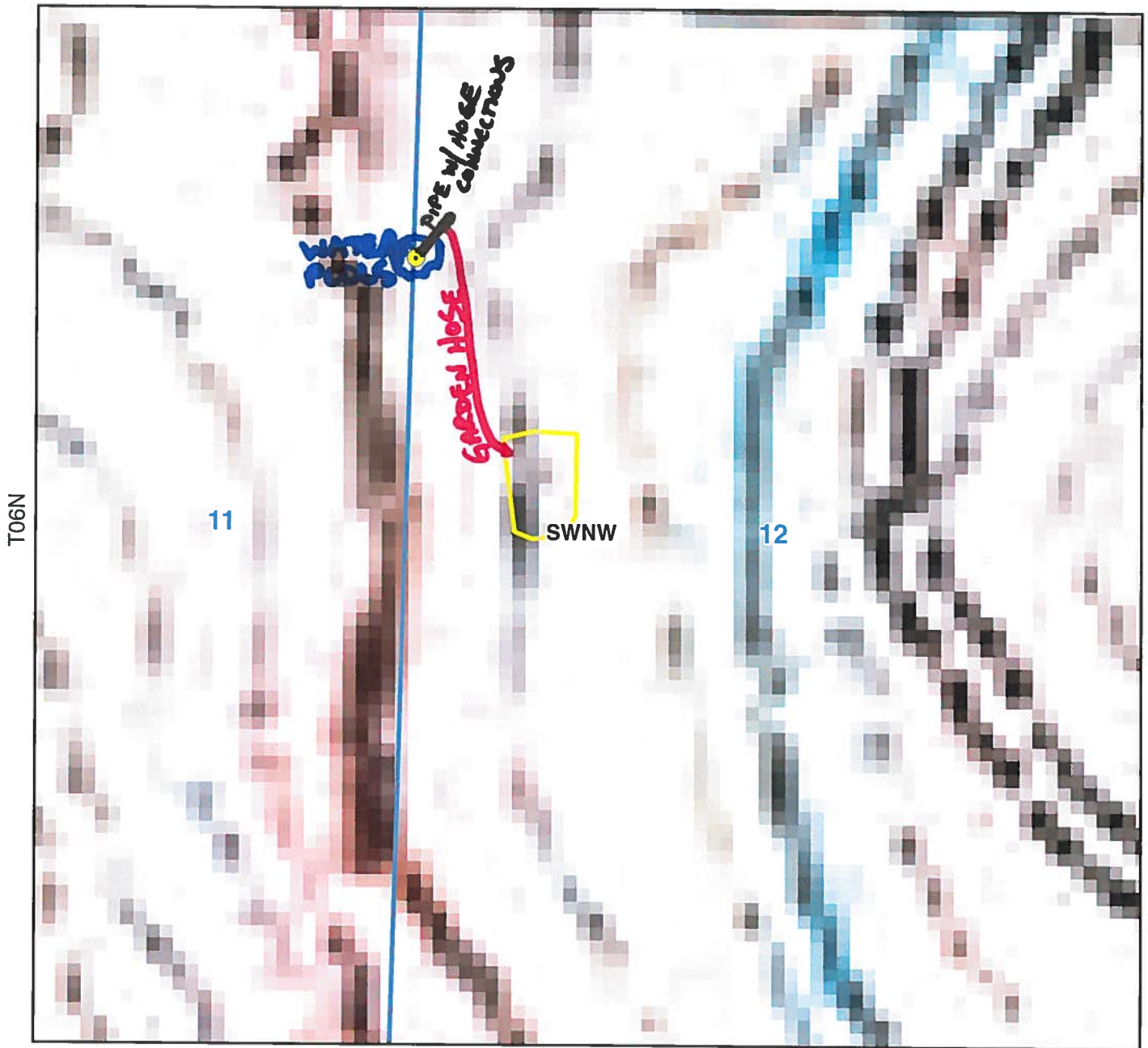
Field Examiner's Name Angela M. Gumm Date 10/23/2012

Reviewer _____ Date _____

Beneficial Use Field Report System Diagram

65-22884

R02E



0 0.01 0.02 0.04 Miles

Topo Map

- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters



State of Idaho
Department of Water Resources
Beneficial Use Field Report Map
65-22884

R02E



0 0.0075 0.015 0.03 Miles

Bing (2011) Aerial Photo

-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters



65-22884 Beneficial Use Field Report Photos



65-22884 Exam 9/13/2012: P/D where unnamed stream pooled and piped to connection for hose.



65-22884 Exam 9/13/2012: P/U (garden) facing north/northwest. P/D in photo background uphill side amongst group of trees to left of power pole.