

Method of Determination: Place of use determined by using 2009, 2011 aerial photography, 2010 Bing Maps satellite imagery and 2011 Google Earth satellite imagery. Point of diversion appears to be in Twp 01N, Rge 17E, Sec. 9, SENW¼. See attached map.

3. ☒ 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

D. FLOW MEASUREMENTS

1. Measurements: BLM personnel stated on the application for permit that the flow rate was 10 gpm.

E. FLOW CALCULATIONS

Measured Method:

Hazen Williams Full Pipe Flow Calculation (based on information provided by the BLM, distance derived in ArcMap and elevations estimated using Google Earth):

$$Q = 0.432 C_1 D^{2.63} S^{0.54}$$

Where:

C_1 = roughness coefficient

D = Diameter in feet

S = Slope

$S = 23' \text{ elevation drop} / 153' \text{ distance} = 0.15$

$C_1 = 140$ (coefficient for polyethylene)

$D = 0.104'$ (1.25" polyethylene)

$Q = 0.05 \text{ cfs}$

F. VOLUME CALCULATIONS ~~Not required under current beneficial use field exam rules~~

Limit to
13,000 gpd.

G. NARRATIVE/REMARKS/COMMENTS

Permit 37-8937 is for 0.02 cfs stockwater and wildlife. Source is a spring referred to as Gold Belt Spring.

Application for permit 37-8937 and proof of beneficial use, submitted by the US Dept of Interior, Bureau of Land Management were received on September 20, 2000.

Gold Belt Spring is located approximately 9.1 miles west and 1.25 miles south of the intersection of Hwy 75 and Hwy 23 in Bellevue. Point of diversion is located in the NESENW¼, and place of use is located in the SENW¼ of Sec. 9, Twp 01N, Rge 17E. The trough system consists of a spring box, pipe, two troughs and an overflow pipe. According to the application for permit, up to 430 range cattle, 4000 sheep and varying numbers of wildlife use the water source. Estimates used in the Hazen Williams Full Pipe Flow Calculation indicate the developed system is capable of delivering 0.05 cfs and information provided on the application for permit estimates the spring flow to be 10 gpm (0.02 cfs).

Overlap analysis indicates there is place of use and point of diversion overlap with water right 37-20124, a partially decreed Federal Reserve water right pursuant to Public Water Reserve 107. PWR 107 rights are intended as in-stream stock watering. As such, condition 238 will be added to the license to clarify the relationship between the two rights. There is also an in-stream stockwater right, 37-14631, recorded in the same place of use.

Recommend licensing a total of 0.02 cfs for stockwater and wildlife use.

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>
STOCKWATER	01/01 to 12/31	0.020 CFS
WILDLIFE	01/01 to 12/31	0.020 CFS
<u>Totals:</u>		0.020 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

Reviewer

Date

6-7-2012

6/29/2012



Gold Belt Spring Trough

QUAD Richardson Summit
CLAIM #
ROLL 1 FRAME 10
DATE 10/08/99 TIME 1057

MICROFILMED
APR 11 2001



Gold Belt Spring Springbox - center of photo

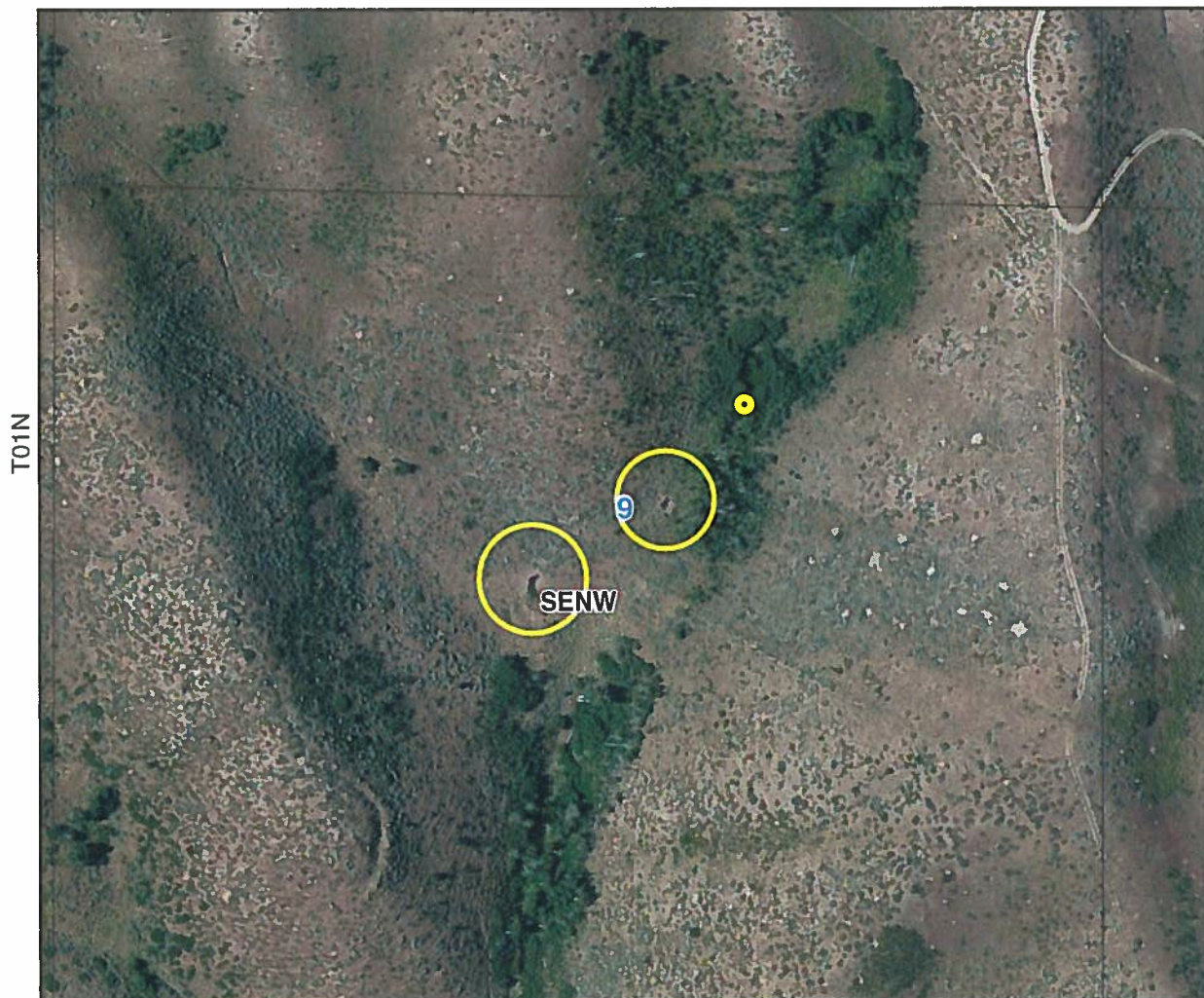
QUAD Richardson Summit
CLAIM #
ROLL 1 FRAME 9
DATE 10/08/99 TIME 1050

MICROFILMED
APR 11 2001

State of Idaho
Department of Water Resources
Attachment To Water Right License
37-8937

This map depicts the STOCKWATER & WILDLIFE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

R17E



0 0.0275 0.055 0.11 Miles

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

