

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8924

Exam Date: 1/19/2012

1. Current Owner: US DEPT OF INTERIOR
BUREAU OF LAND MANAGEMENT
400 WEST F ST
SHOSHONE ID 83352
(208)732-7200
2. Accompanied by: Field exam completed in office utilizing Department resources.

- | | |
|---|----------------------------------|
| 3. <u>SOURCE</u>
UNNAMED STREAM | <u>TRIBUTARY</u>
SINKS |
|---|----------------------------------|

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-17594 (in-stream stockwater; 0.02 cfs)
2. Other water rights with the same point of diversion: None

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

UNNAMED STREAM L3 NE1/4NE1/4NW1/4 Sec. 5, Twp 01S, Rge 12E, B.M.
CAMAS County

Method of Determination: Point of diversion determined by using 2009 aerial photography, 2010 Bing Maps satellite imagery and 2011 Google Earth satellite imagery. Point of diversion appears to be in Twp 01S, Rge 12E, S 5, L3 NENENW¼. See attached map.

2.

PLACE OF USE: STOCKWATER STORAGE

Twp Rge Sec	NE				NW				SW				SE				
	<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>	<u>Totals</u>
01S 12E 5					X												
					L 3												

PLACE OF USE: WILDLIFE STORAGE

Twp Rge Sec	NE				NW				SW				SE				
	<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>	<u>Totals</u>
01S 12E 5					X												
					L 3												

Method of Determination: Place of use determined by using 2009 aerial photography, 2010 Bing Maps satellite imagery and 2009 Google Earth satellite imagery. Point of diversion appears to be in Twp 01S Rge 12E S 5 NENW¼. 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 N/A

E. FLOW CALCULATIONS N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A
2. Volume Calculations for Other Uses: Stockwater Storage and Wildlife Storage:

Surface area of reservoir = 0.05 acres

Determined using 2009 aerial photography and 2010 satellite imagery in Arcmap.

Reservoir Capacity = **0.2 AF**

Determined using flat bottom reservoir equation from IDWR Field Examiners Handbook and information provided in permit application.
(Capacity = Surface area x Maximum Depth)
0.05 acres x 4.0 feet = 0.2 AF

Potential Stock and Wildlife Use:

(450 range cattle x 12 gpd) x 275 days/ 325850 = 4.6 AF (Based on a potential 9 month grazing season)

30 wild ungulates x 12 gpd x 365 days/ 325850 = 0.40 AF

Total: 4.6 AF + 0.40 AF = **5.0 AF**

G. NARRATIVE/REMARKS/COMMENTS

Permit 37-8924 is for stockwater storage and wildlife storage. Source is an unnamed stream and storage reservoir is referred to as Base Line Reservoir.

Application for permit 37-8924 submitted by the US Dept of Interior, Bureau of Land Management was received on September 01, 2000 and proof of Beneficial Use was submitted the same day.

Base Line Reservoir is located approximately 13.5 miles west and 1.8 miles north of Fairfield. Point of diversion and place of use are located in the NENENW¼ of Sec. 5, Twp 01S, Rge 12E. The reservoir is a small pit reservoir with a capacity of 0.2 acre feet that was constructed below a spring source for an unnamed stream.

According to the application for permit, up to 450 range cattle and varying numbers of wildlife use the water source. Precipitation deficit data from the University of Idaho ET website indicates a mean of 669 mm (2.19 AF) per acre for small stockwater ponds in the Fairfield area. Based on the calculated surface area of 0.05 acres, this indicates that approximately 0.1 AF could potentially evaporate from the reservoir each year. Potential stock and wildlife use was calculated at 5.0 AF, far exceeding the 0.2 AF reservoir capacity. Calculations were based on stock numbers listed on the permit and a number of wild ungulates thought to represent the size of an average deer herd.

Overlap analysis indicates the point of diversion for right 37-17594 is within the same 10 acre tract. As 37-17594 is an in-stream stockwater right, I would assume the point of diversion to be the point where water typically begins flowing in the channel and would be a separate point of diversion from that of right 37-8924, which is a man made embankment holding water in the impoundment.

The application for permit requested 0.3 AF. As the reservoir has a storage capacity of 0.2 AF and a potential for evaporative loss of 0.1 AF, evaporative losses will be included in the recommended volume for a total of 0.3 AF.

Recommend permitting an annual volume of 0.3 AF.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER STORAGE	01/01 to 12/31	0.30 AF
WILDLIFE STORAGE	01/01 to 12/31	0.30 AF
<u>Totals:</u>		0.30 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

I. AUTHENTICATION

Field Examiner's Name

Date

1-23-2012

Reviewer

Date

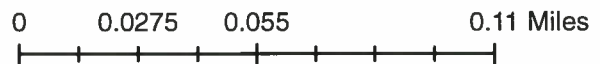
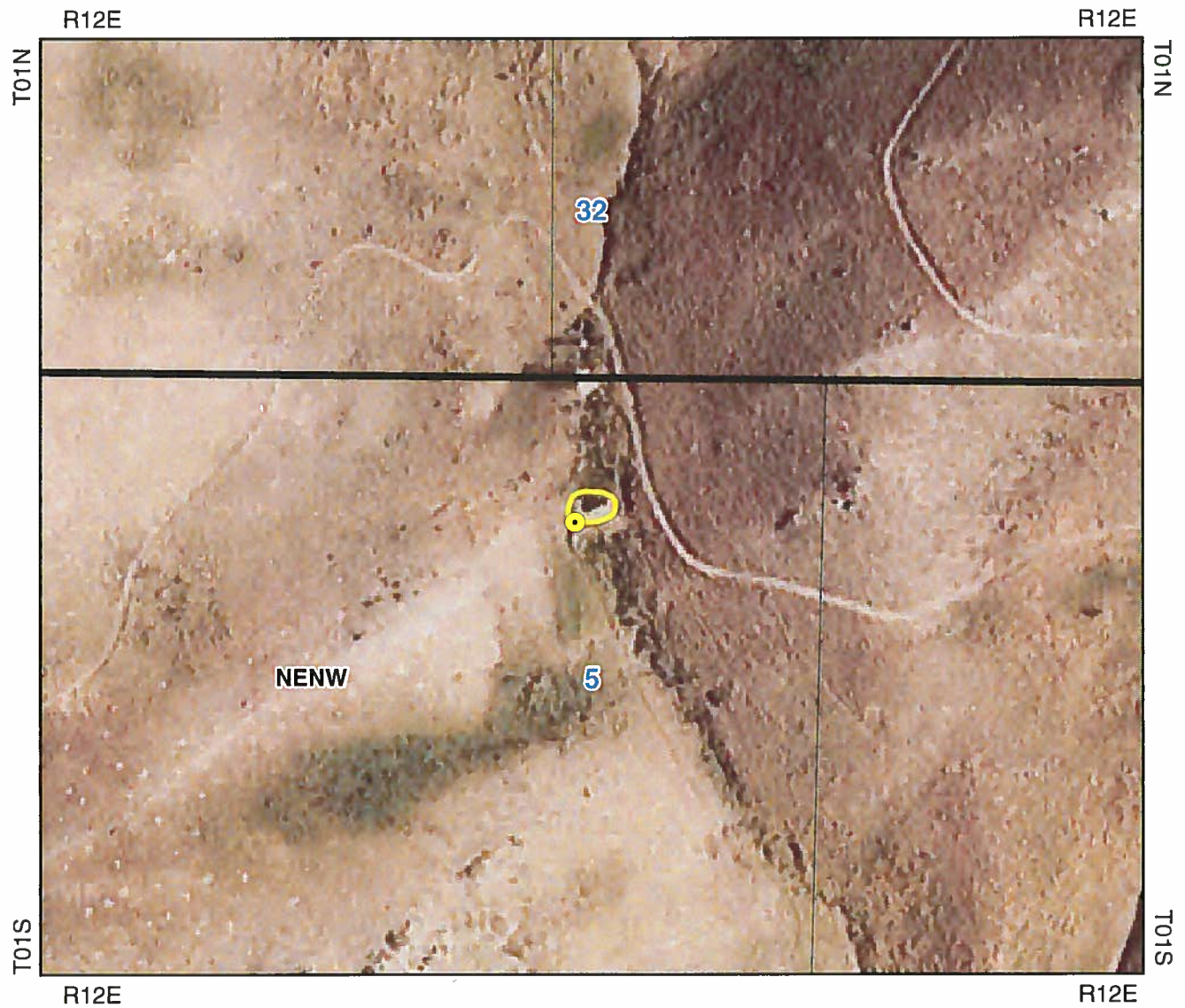
1/23/2012



State of Idaho
Department of Water Resources
Water Right License

37-8924

Water Service Area Boundary for Us Dept Of Interior



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

