

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8920

Exam Date: 4/24/2012

1. Current Owner: US DEPT OF INTERIOR
BUREAU OF LAND MANAGEMENT
400 WEST F ST
SHOSHONE ID 83352
(208)732-7200
2. Accompanied by: Completed in-house utilizing Department resources and information submitted by the applicant.
3. SOURCE TRIBUTARY
UNNAMED STREAM 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:**

UNNAMED STREAM NE1/4NE1/4NE1/4 Sec. 26, Twp 03S, Rge 11E, B.M.
ELMORE 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 03S, Rge 11E, S 26, NENENE¼. See attached map.

2.

PLACE OF USE: STOCKWATER STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
03S	11E	26	X																

PLACE OF USE: WILDLIFE STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
03S	11E	26	X																

Method of Determination: Place of use 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 03S, Rge 11E, S 26, NENENE¼. 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 None

E. FLOW CALCULATIONS None

F. VOLUME CALCULATIONS

1. Volume Calculations for Other Uses: Stockwater Storage and Wildlife Storage:

Surface area of reservoir = 0.04 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)
0.04 acres x 4.0 feet = 0.2 AF

Potential Stock and Wildlife Use:

(1025 range cattle x 12 gpd) + (2000 sheep x 2gpd) x 182 days/ 325850 = 9.1 AF (Based on a potential 6 month grazing season)

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

Total: 9.1 AF + 0.40 AF = 9.5 AF

G. NARRATIVE/REMARKS/COMMENTS

Permit 37-8920 is for stockwater storage and wildlife storage. Source is an unnamed stream and storage reservoir is referred to as East TP Reservoir.

Application for permit 37-8920 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.

East TP Reservoir is located approximately 16 miles west and 13.9 miles south of Fairfield. Point of diversion and place of use are located in the NENENE¼ of Sec. 26, Twp 03S, Rge 11E. The reservoir is a small pit reservoir with a capacity of 0.2 acre feet and the water source is an unnamed stream.

According to the application for permit, up to 1025 range cattle, 2000 sheep and varying numbers of wildlife use the water source. Precipitation deficit data from the University of Idaho ET website indicates a mean of 679 mm (2.23 AF) per acre for small stockwater ponds in the Hill City area. Based on the calculated surface area of 0.04 acres, this indicates that approximately 0.1 AF could potentially evaporate from the reservoir each year. Potential stock and wildlife use was calculated at 9.5 AF, exceeding the 0.16 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.

This field exam was completed in-house as the only known access road to the site was washed out and impassable with a four wheel drive vehicle. Reservoir depth was based on an average depth of BLM stockwater ponds, which from my experience rarely exceeds 4 feet in this region.

The permit requested a volume of 5 AF, which I'm guessing was a typo, as a reservoir with a 0.04 acre surface area would have to be 125 feet deep to have a storage capacity of 5 AF. With an estimated capacity of 0.2 AF and potential evaporative losses 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

Reviewer

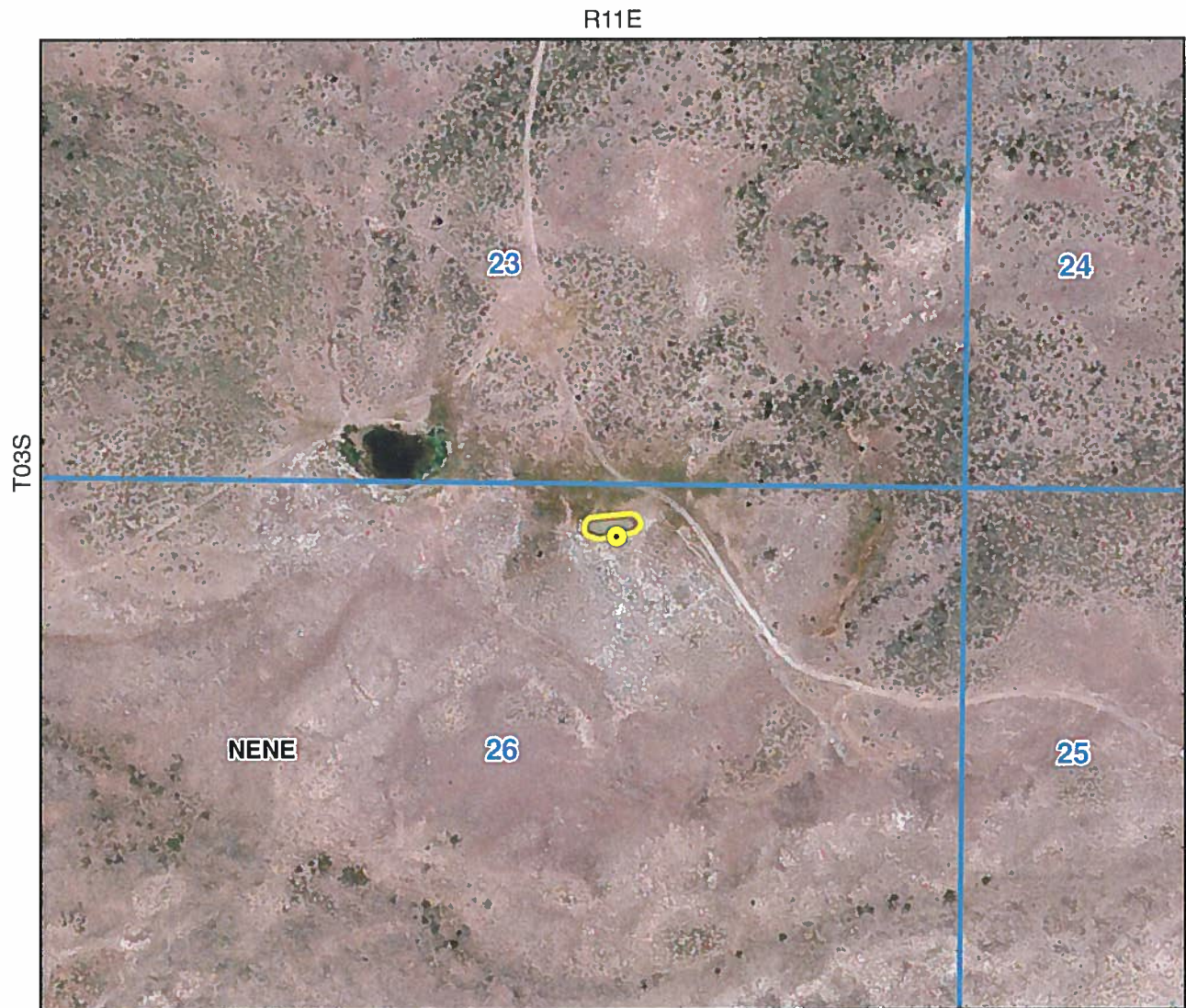
Date

Bill Miller 5-1-2012
[Signature] 5/9/2012

State of Idaho
Department of Water Resources
Water Right License

37-8920

Water Service Area Boundary for Us Dept Of Interior



0 0.0275 0.055 0.11 Miles

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



East TP Reservoir
Photo taken 04/16/97



APR 11 2001
MICROFILMED