

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8927

Exam Date: 4/17/2012

1. Current Owner: US DEPT OF INTERIOR
BUREAU OF LAND MANAGEMENT
400 WEST F ST
SHOSHONE ID 83352
(208)732-7200

2. SOURCE
CALF CREEK

TRIBUTARY
CLOVER CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-17703 (in-stream stockwater; 0.02 cfs)
2. Other water rights with the same point of diversion: None

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

CALF CREEK NW1/4NW1/4
GOODING County

Sec. 14, Twp 03S, Rge 12E, B.M.

Method of Determination: Waypoints were collected with a Garmin GPS map 76S receiver and downloaded into an ArcMap shapefile that corresponds with 2009 aerial photography and verified the point of diversion to be in Twp 03S Rge 12E S 14 NWNW¼. See attached map.

2.

PLACE OF USE: WILDLIFE STORAGE

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>	
03S	12E	14						X											

PLACE OF USE: STOCKWATER STORAGE

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>	
03S	12E	14						X											

Method of Determination: Tracks were collected with a Garmin GPS map 76S receiver and downloaded into an ArcMap shapefile that corresponds with 2009 aerial photography and verified the point of diversion to be in Twp 03S Rge 12E S 14 NWNW¼. 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 = **0.2 acres**

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

Reservoir Capacity = **0.9 AF**

Determined using flat bottom reservoir equation from IDWR Field Examiners Handbook and information provided in permit application.
(Capacity = Surface area x Maximum Depth)
0.15 acres x 6 feet = 0.9AF

Potential Stock and Wildlife Use:

$[(1500 \text{ cattle} \times 12 \text{ gpd}) + (5300 \text{ sheep} \times 2 \text{ gpd})] \times 182 \text{ days} / 325850 = 16 \text{ AF}$ (Based on a potential 6 month grazing season)

$30 \text{ wild ungulates} \times 12 \text{ gpd} \times 365 \text{ days} / 325850 = 0.40 \text{ AF}$

Total: $21.9 \text{ AF} + 0.40 \text{ AF} = \underline{16.4 \text{ AF}}$

G. **NARRATIVE/REMARKS/COMMENTS**

Permit 37-8927 is for stockwater storage and wildlife storage. Source is a Calf Creek and storage reservoir is referred to as Found Calf Reservoir.

Application for permit 37-8927 submitted by US Department of the Interior, Bureau of Land Management was received on September 1, 2000 and Proof of Beneficial Use was submitted on the same day.

Found Calf Reservoir is located approximately 10.8 miles west and 12.0 miles south of Fairfield. Water from Calf Creek flows through this excavated on-stream pit type reservoir. Reservoir capacity is estimated to be 0.9 acre feet. This reservoir was apparently "discovered" by BLM personnel that were performing field verification of SRBA water right claims.

According to the application for permit up to 1500 range cattle and 5300 range sheep potentially utilize this water source. Potential stock and wildlife use was calculated at 16.4 AF, exceeding the 0.9 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. Evidence of use by range cattle was present and evidence of use by wildlife was abundant.

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 0.2 acres, this indicates that approximately 0.5 AF could potentially evaporate from the reservoir each year.

Overlap analysis for place of use indicates there also is an in-stream stockwater right, 37-17703, in the NWNW1/4 of Twp 03S Rge 12E S 14.

Legal description for the point of diversion places the reservoir in the SENWNW1/4, but the reservoir is actually located in the NENWNW1/4. Legal description was changed from the 10 acre tract to the 40 acre tract (NWNW1/4) to correctly describe the location.

The application for permit requested 2.0 AF. As the reservoirs storage capacity is estimated at 0.9 acre feet, 0.5 AF of potential evaporative losses will be included in the recommended volume for a total of 1.4 AF.

Recommend permitting an annual volume of 1.4 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>
WILDLIFE STORAGE	01/01 to 12/31	1.4 AF
STOCKWATER STORAGE	01/01 to 12/31	1.4 AF
<u>Totals:</u>		1.4 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 Muth
4/27/2012

Chris Mervin
4/27/2012

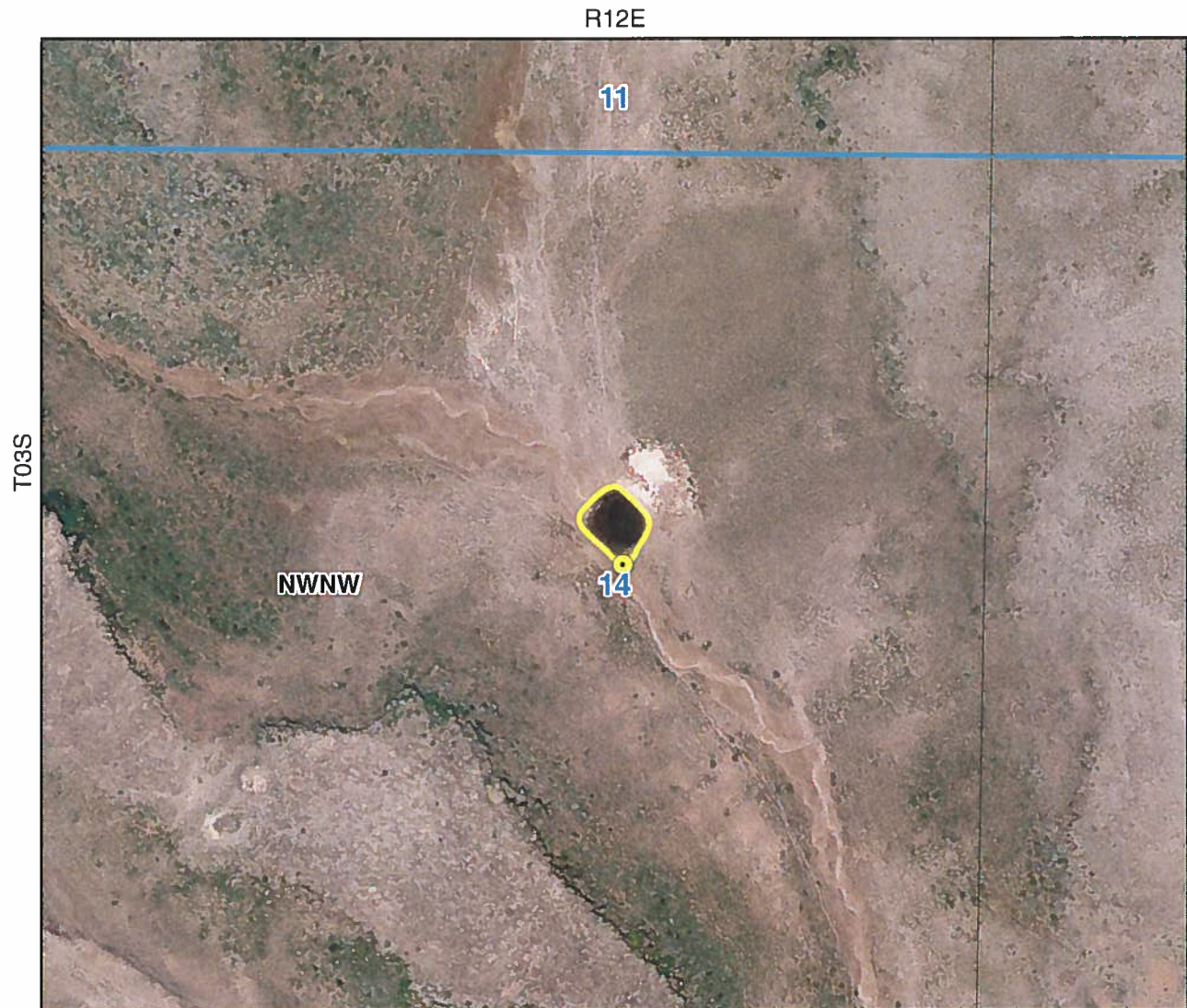


Figure 1: Found Calf Reservoir from hilltop looking east.

State of Idaho
Department of Water Resources
Water Right License

37-8927

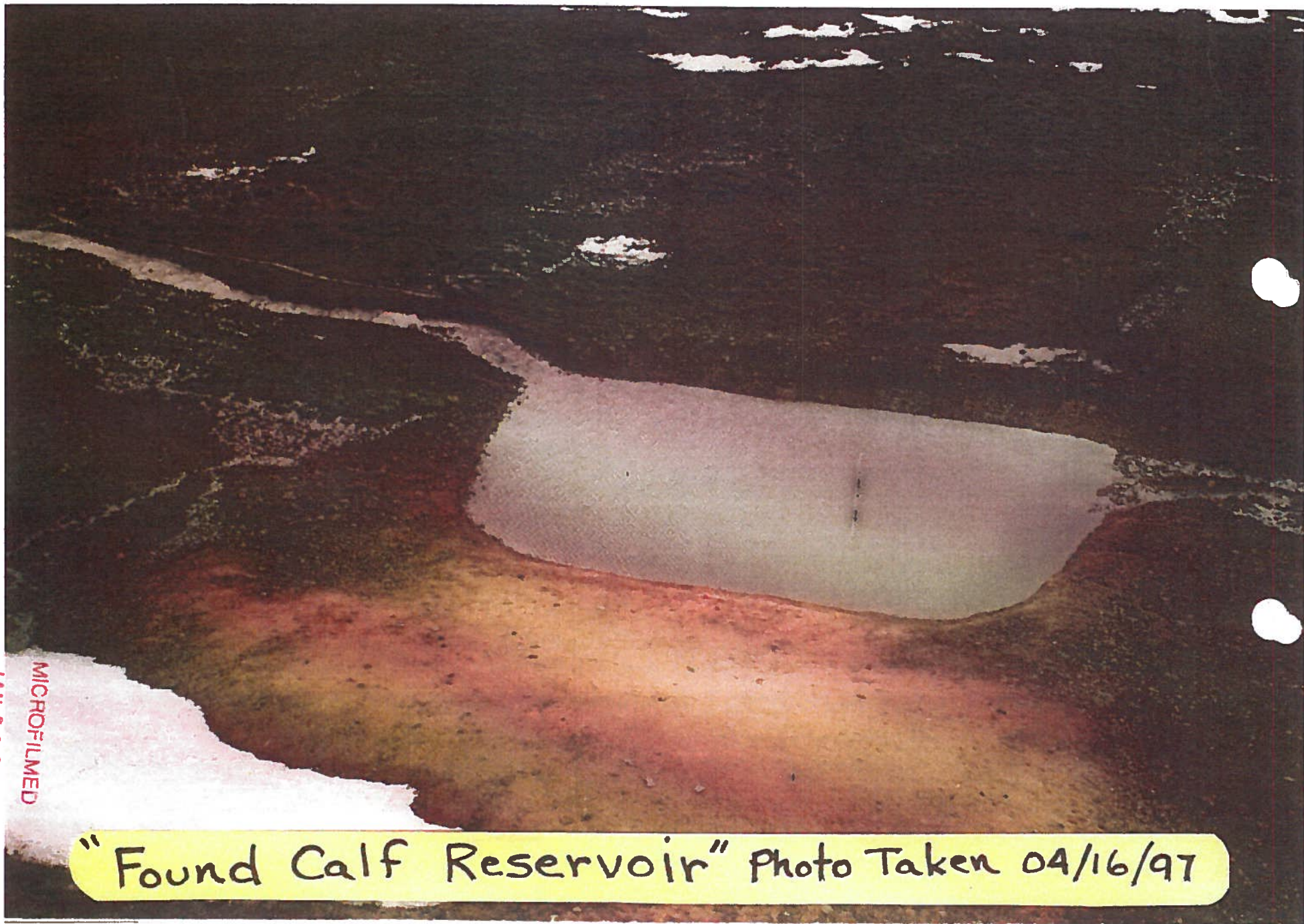
Water Service Area Boundary for Us Dept Of Interior



0 0.03 0.06 0.12 Miles

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





JAN 09 2002

MICROFILMED

"Found Calf Reservoir" Photo Taken 04/16/97