

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8934

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. SOURCE TRIBUTARY
UNNAMED STREAM SINKS

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-16799; 37-15967; 37-15969 and 37-15983.
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 SW1/4SE1/4NW1/4 Sec. 35, Twp 01N, Rge 21E, B.M.
BLAINE County

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 01N Rge 21E S 35 SWSE1/4. 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
01N	21E	35								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
01N	21E	35								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 01N Rge 21E S 35 SENW1/4. 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 = **0.09 acres**

Determined using aerial photography and satellite imagery in Arcmap and gps tracks collected at the site.

Reservoir Capacity = **0.36 AF**

Determined using flat bottom reservoir equation from IDWR Field Examiners Handbook and information provided in permit application.
(Capacity = Surface area x Maximum Depth)
0.09 acres x 4 feet = 0.36AF

Potential Stock and Wildlife Use:

$[(215 \text{ cattle} \times 12 \text{ gpd}) + (6 \text{ horses} \times 12 \text{ gpd})] \times 182 \text{ days} / 325850 = 1.5 \text{ AF}$ (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: $1.5 \text{ AF} + 0.40 \text{ AF} = \underline{1.9 \text{ AF}}$

G. **NARRATIVE/REMARKS/COMMENTS**

Permit 37-8934 is for stockwater storage and wildlife storage. Source is an unnamed stream. Development is referred to as Road Reservoir.

Application for permit 37-8934 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.

Road Reservoir is located approximately 5.0 miles north and 1.0 miles east of the intersection of Hwy 20 and Hwy 26 in Carey. Water from an unnamed stream flows into this excavated on-stream pit type reservoir. Reservoir capacity is estimated to be 0.36 acre feet. Approximately 0.15 miles downstream of the reservoir the unnamed stream sinks.

According to the application for permit, 215 range cattle and 6 horses potentially utilize this water source. Potential stock and wildlife use was calculated at 1.9 AF, exceeding the 0.36 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 and wildlife were present at the reservoir on the day of the exam.

Precipitation deficit data from the University of Idaho ET website indicates a mean of 470 mm (1.54 AF) per acre for small stockwater ponds in the Craters of the Moon area. Based on the calculated surface area of 0.09 acres, this indicates that approximately 0.14 AF could potentially evaporate from the reservoir each year.

Overlap analysis for place of use indicates there are three in-stream stockwater rights appurtenant to the NESW1/4, with only 37-15969 appurtenant to the unnamed stream where the reservoir is located. Water Right 37-15967 is appurtenant to an unnamed stream to the northeast and 37-15969 is appurtenant to Road Canyon Creek to the east. There is also a fourth water right, 37-16799 that is a federal reserve right for stockwater from a spring located in the NESEW1/4. Water right 37-15969 indicates this stream is tributary to Carey Lake, but I verified on my field visit that this stream sinks in the NESW1/4 just 0.15 miles south of the reservoir.

Condition R04 was placed on the permit indicating this water right should be regulated by the watermaster for water district 37N. An email in the file indicated that this water source wasn't regulated by either 37N or 37U. As this stream sinks and isn't regulated by a watermaster, condition R04 will be dropped from the license.

The application for permit requested 0.5 AF. As the reservoirs storage capacity is estimated at 0.36 acre feet, 0.14 AF of potential evaporative losses will be included in the recommended volume for a total of 0.5 AF.

Recommend permitting an annual volume of 0.5 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	0.50 AF
WILDLIFE STORAGE	01/01 to 12/31	0.50 AF
<u>Totals:</u>		0.50 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

4-27-2012

Reviewer

Date

5/9/2012

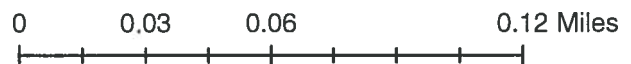
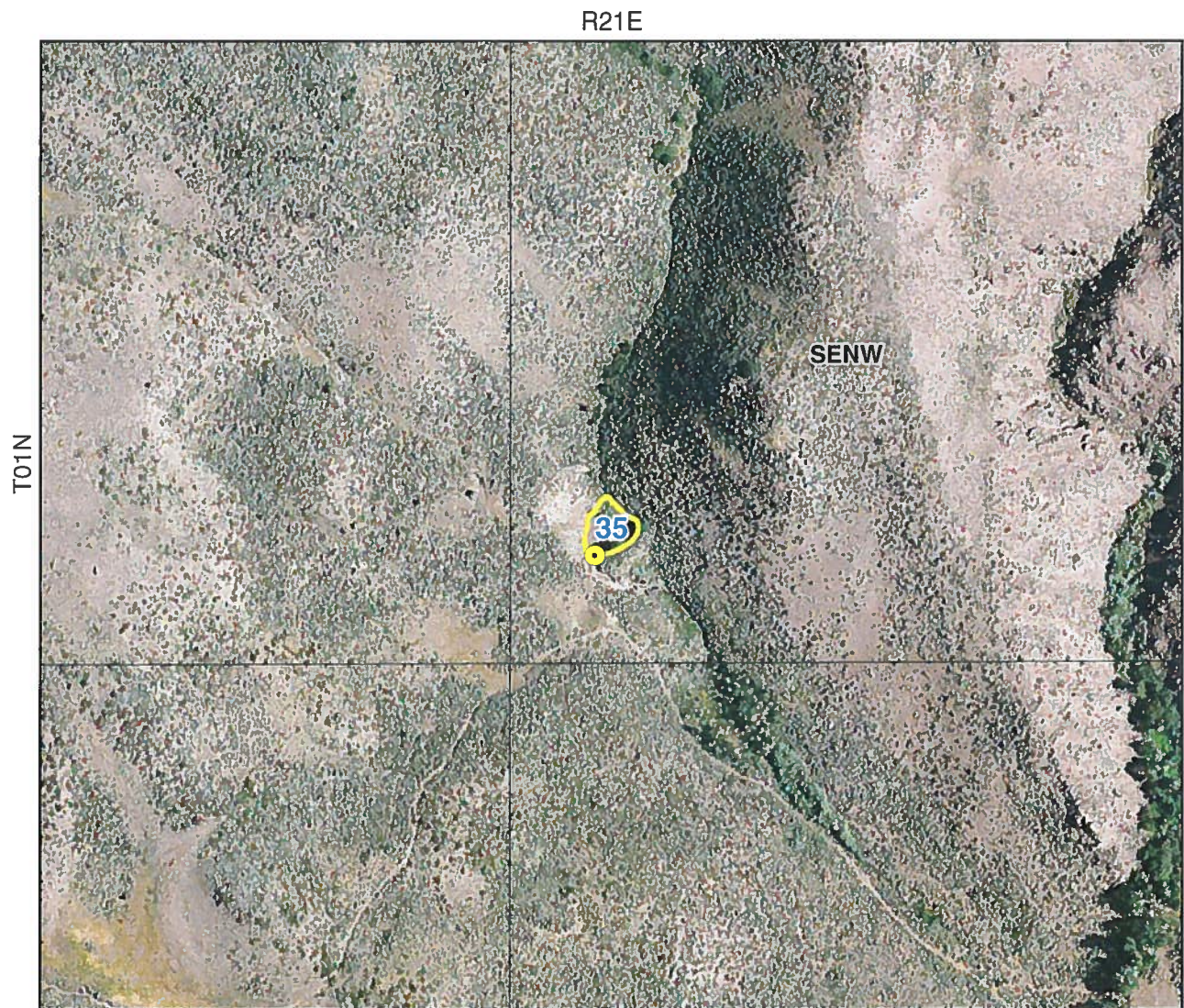


Figure 1: Road Reservoir

State of Idaho
Department of Water Resources
Water Right License

37-8934

Water Service Area Boundary for Us Dept Of Interior



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

