

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 36-8495

Exam Date: 10/20/2010

1. Current Owner: 6 X RANCH LLC
C/O BLAKE QUINN
PO BOX 226789
LOS ANGELES CA 90022

2. Accompanied by: Corey Skinner (IDWR)

Preston Markcroft

Phone No: 208-339-1443

Address: Mackay, ID

Relationship to Permit Holder: 6 X Ranch Manager

3. **SOURCE**

UNNAMED STREAM

TRIBUTARY

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 SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM

NW1/4NE1/4

Sec. 24, Twp 01S, Rge 27E, B.M.

BUTTE County

Method of Determination:

During the field visit a gps point was taken and the point of diversion was found to be permitted in the wrong 10-acre tract. Aerial photography also verifies the pond and point of diversion are obviously in the NENWNE quarter and not the SENWNE. Per correspondence with the State Office (attached email) and statute, the POD only needs to be described down to the 40 acre tract.

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
01S	27E	24		X															

Method of Determination:

A track with the DNR Garmin was gps'd and downloaded into a shapefile that corresponds with 2009 Aerial photography and verifies the pond is in the Twp 01S Rge 27E Sec 24 NWNE. (See attached map B)

3. _____ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- _____X_____ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- _____X_____ Aerial Photo Attached (required for irrigation of 10+ acres).
- _____X_____ Photo of Diversion and Stockwater pond attached.

<u>Well or Diversion ID No.*</u>	<u>N/A Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
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D. FLOW MEASUREMENTS N/A

Measurements: N/A

E. FLOW CALCULATIONS N/A

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: **N/A**

2. Volume Calculations for Other Uses: Stockwater Storage

Maximum water surface of pond= 14765 sq.ft. $\frac{14765 \text{ sq. ft.} + 10233 \text{ sq. ft.}}{2} = 12499 \text{ sq. ft.}$

Pond bottom surface area= 10233 sq.ft.

Average surface area = 12499 sq.ft. $12499 \text{ sq. ft.} \times 3.8 \text{ ft.} = 47496.2 \text{ cu. ft.} = 1.09 \text{ AF}$

Depth = 3.8 ft. (see survey notes) 43,560

Volume of pond = 1.1 AF

G. NARRATIVE/REMARKS/COMMENTS

Permit 36-8495 in the name of 6X Ranch LLC is for stockwater storage of spring runoff to a pond south of Arco.

Application for permit 36-8495 in the name of Goddard's Bar 13 Ranch LTD was received March 8, 1990 and Proof of Beneficial Use followed on March 14, 1990. On September 27, 1999 an Assignment of Permit was submitted to the Department conveying the permit to 6X Ranch LLC.

A discrepancy on the permit was found during the field visit. The permit describes the point of diversion to be in the SENWNE of section 24. A gps point was taken and found the point of diversion be located in the wrong 10-acre tract. Aerial photography also verifies the pond and point of diversion are obviously in the NENWNE quarter of section 24. Since the source is runoff and not an actual unnamed stream, the point of diversion should be the middle of the pond. Per correspondence with the State Office (attached email) and statute, the POD will only need to be described down to the 40 acre tract. In view of the fact that there are no other water users in the vicinity, injury will not be an issue if the QQQ is dropped. It is recommended that the SE QQQ be dropped to have the point of diversion described as Twp 01S Rge 27E Sec 24 NWNE. (see attached map A)

The stockwater pond is basically a natural low spot out in the desert that has been excavated to catch the spring runoff. A raised embankment was constructed with several low areas created for the spring runoff to fill the pond annually and water approximately 450 range cows. (per Ranch Manager) Since the source is runoff with an annual onetime fill for the pond evaporation and seepage losses are irrelevant since water is not diverted into the pond to keep it full. Recommended no flow.

Gps'd DR Garmin Tracks for the maximum surface area of the pond and the pond bottom area downloaded into an Arcmap shapefile calculated an average surface area of 12499 sq. ft. An elevation survey of the pond bottom showed an almost uniform depth of 3.8 ft.

$$(12499 \text{ sq. ft} \times 3.8 \text{ ft.} = \frac{47496.2}{43,560} \text{ cu. ft.} = 1.09 \text{ AF})$$

Therefore I recommend an annual volume of 1.1 AF.

Using the 450 cows and assuming 12 gallons per day per head, 365 days a year yields a potential stockwater volume requirement of 6.6 af. University of Idaho ET data shows a precipitation deficit of 706 mm (2.32 AF) per acre for small stock ponds in the Arco area. Using this value and the average surface area of 12499 sq.ft. (0.29 acres) approximately 0.67 AF could evaporate from the pond each year. Therefore the recommended 1.1 AF appears to be reasonable for 450 cows.

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>	<u>ANNUAL VOLUME</u>
STOCKWATER STORAGE	1/01 to 12/31	N/A	1.1 AF
<u>Totals:</u>			1.1 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 Sara Reeder Date 11/19/10

Reviewer [Signature] Date 11/19/2010

pond and new pod

wrong pod

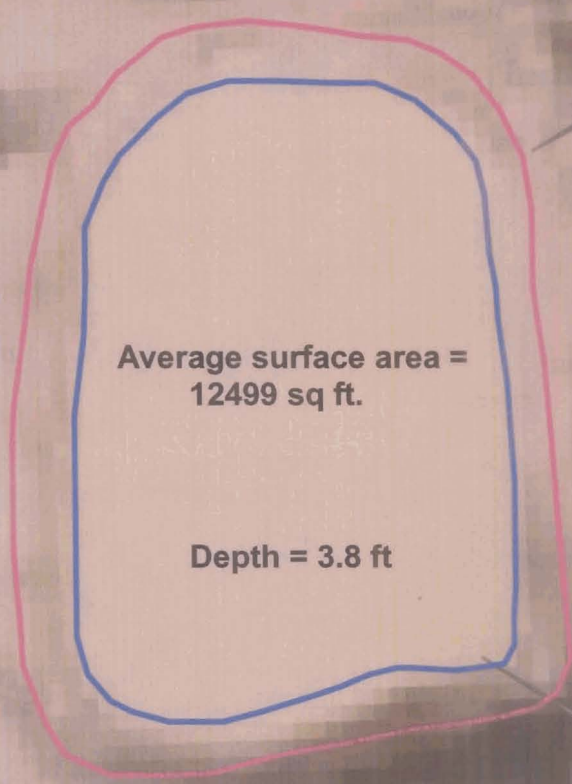
36-8495 6X Ranch-stockwater

36-4219 BLM stock/wildlife storage
36-2817 BLM stock storage

36-13818 6X Ranch stockwater

01S 27E 24

A



Average surface area =
12499 sq ft.

Depth = 3.8 ft

Maximum water surface = 14765 sq ft.

Pond Bottom area = 10233 sq ft.

B

