

[illegible]

Method of Determination:

3. ☐ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ 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

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
		3			

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1. Measurements: **N/A**

E. FLOW CALCULATIONS☐ Additional Computation Sheets Attached

Measured Method:

Theoretical yield:

$$Q = \frac{8.8 \times (Hp) \times (Eff)}{H}$$

Where: Hp = 3 Hp (per Eaton Well Drilling Co. records)

Eff = efficiency = 70% assumed

H = total head = pumping level = (2.31 x system pressure)
 assume pumping level of 300 feet (based on Eaton Well Drilling Co. records)
 system pressure = 50 psi (based on Eaton Well Drilling Co. records)

$$H = 300 + (50 \times 2.31) = 415.5$$

$$Q = \frac{8.8 \times 3 \times .70}{415.5} = 0.04 \text{ cfs}$$

F. VOLUME CALCULATIONS

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

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: **N/A****G. NARRATIVE/REMARKS/COMMENTS**

Permit 47-8401 was permitted for the diversion of up to 0.08 cfs for two homes developed on separate plats.

Application for permit 47-8401 submitted by David Ross and/or Mark Lewis, submitted on June 10, 1996 and proof of beneficial use was submitted October 10, 1997.

Taxlot data indicates the parcel is a 20 acre lot. Tracks taken during field exam indicated the irrigated portion of the lot, i.e. lawn area adjacent to house, at 0.5 acres. There is a stock pen and a watering trough present on the property (see attached map) and the owner stated he owns 20 cattle. I counted 16 while there on field exam.

The second home was never constructed as planned and a theoretical yield calculation indicates the well is capable of pumping 0.04 cfs. Therefore I recommend permitting 0.04 cfs for Domestic use.

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 DIVERSION VOLUME</u>
DOMESTIC	1/01 to 12/31	0.040 CFS	1.2AF
<u>Totals:</u>		0.040 CFS	1.2AF

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

[Signature]
[Signature]

1-20-2011
 2/15/2011

47-8401





Figure 1: Front Yard and house of property.



Figure 2: Back Yard and House at property.



Figure 3: Stockyard.