

## A. GENERAL INFORMATION

Exam Date: 7/17/2012

- And

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- ### 3. SOURCE

SPRING

## TRIBUTARY

## SINKS

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: None

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

SPRING NW1/4SE1/4NE1/4  
ADAMS County

Sec. 30, Twp 18N, Rge 02W, B.M.

Method of Determination: Arc Map (Aerial Photo)

2.1

**PLACE OF USE:** STOCKWATER STORAGE

[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. (N/A)

| <u>Well or Diversion<br/>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<br/>Size</u> |
|--------------------------------------|-------------------|-----------|-------------------------|------------------|----------------------------------------------|
| _____                                | _____             | _____     | _____                   | _____            | _____                                        |
| _____                                | _____             | _____     | _____                   | _____            | _____                                        |
| _____                                | _____             | _____     | _____                   | _____            | _____                                        |
| _____                                | _____             | _____     | _____                   | _____            | _____                                        |

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

## D. FLOW MEASUREMENTS (N/A)

1.

| <u>Measurement<br/>Equipment</u> | <u>Type</u> | <u>Make</u> | <u>Model No.</u> | <u>Serial No.</u> | <u>Size</u> | <u>Calib. Date</u> |
|----------------------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|
| _____                            | _____       | _____       | _____            | _____             | _____       | _____              |
| _____                            | _____       | _____       | _____            | _____             | _____       | _____              |

2. Measurements: No field measurement. No active flow into or out of stock water pond in which to take a flow measurement.

## E. FLOW CALCULATIONS

Measured Method: (N/A)

\_\_\_\_\_Additional Computation Sheets Attached

**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: Stock Water Storage

$$\text{Surface Area} = 0.31 \text{ AC}$$

$$\text{Maximum Depth} = 6'$$

$$V = 0.30 \text{ AC} \times 6' = 1.8 \text{ AF}$$

Calculated volume is near the 2.0 AF per the permit. Therefore allow the 2.0 AF of storage volume.

**G. NARRATIVE/REMARKS/COMMENTS****STOCK WATER STORAGE SYSTEM:**

**A stock water pond provides water for 300 head of cattle and sheep. The source of water for the stock water pond is a spring in the pond and springs located upland and easterly of the stock water pond. The stock water pond has a surface area of approximately 0.31 ac. The dam is 8 feet high, providing a maximum water depth of approximately 6 feet when full. The maximum storage volume is approximately 2.0 AF.**

Have conditions of permit approval been met? ☒ Yes ☐ No

CONDITION NO.1 (220) – Pond capacity shall not exceed a total capacity of 1.5 AF, or a total surface area of 0.25 ac. As stated on the permit, the total appropriated annual volume is 2.0 AF, which exceeds the total capacity allowed as stated per this condition. Based on a 9/23/09 memorandum, the additional pond capacity was required due to evaporation and seepage losses.

## RATE &/OR STORAGE RECOMMENDED FOR LICENSING

| Description               | Rate of Flow (cfs) |      | Storage (af) |
|---------------------------|--------------------|------|--------------|
| Permit Amount             | 0.04               | &/or | 2.0          |
| Beneficial Use Limit      | 0.04               | &/or | N/A          |
| System Measurement        | N/A                | &/or | N/A          |
| Proof Fee Amount          | 0.20               | &/or | 20.0         |
| <b>Recommended Amount</b> | 0.04               | &/or | 2.0          |

### H. RECOMMENDATIONS

#### 1. Recommended Amounts

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>DIVERSION RATE</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|-----------------------|----------------------|
| STOCKWATER            | 01/01 to 12/31       | 0.040 CFS             |                      |
| STOCKWATER STORAGE    | 01/01 to 12/31       |                       | 2.00 AF              |
| <u>Totals:</u>        |                      | 0.040 CFS             | 2.00 AF              |

#### 2. Recommended Amendments

\_\_\_ Change P.D. as reflected above    \_\_\_ Add P.D. as reflected above    X None

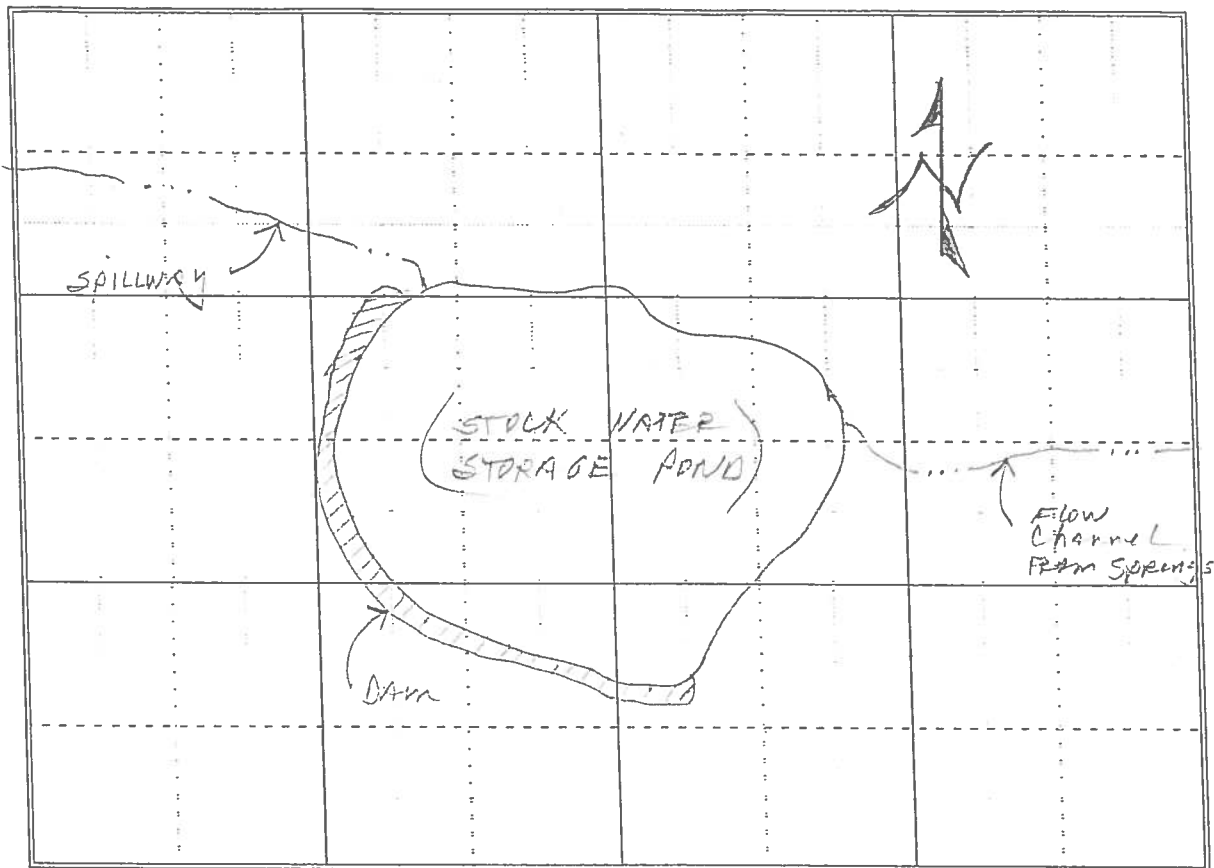
\_\_\_ Change P.U. as reflected above    \_\_\_ Add P.U. as reflected above    \_\_\_ Other

### I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 10-1-12

Reviewer \_\_\_\_\_ Date \_\_\_\_\_

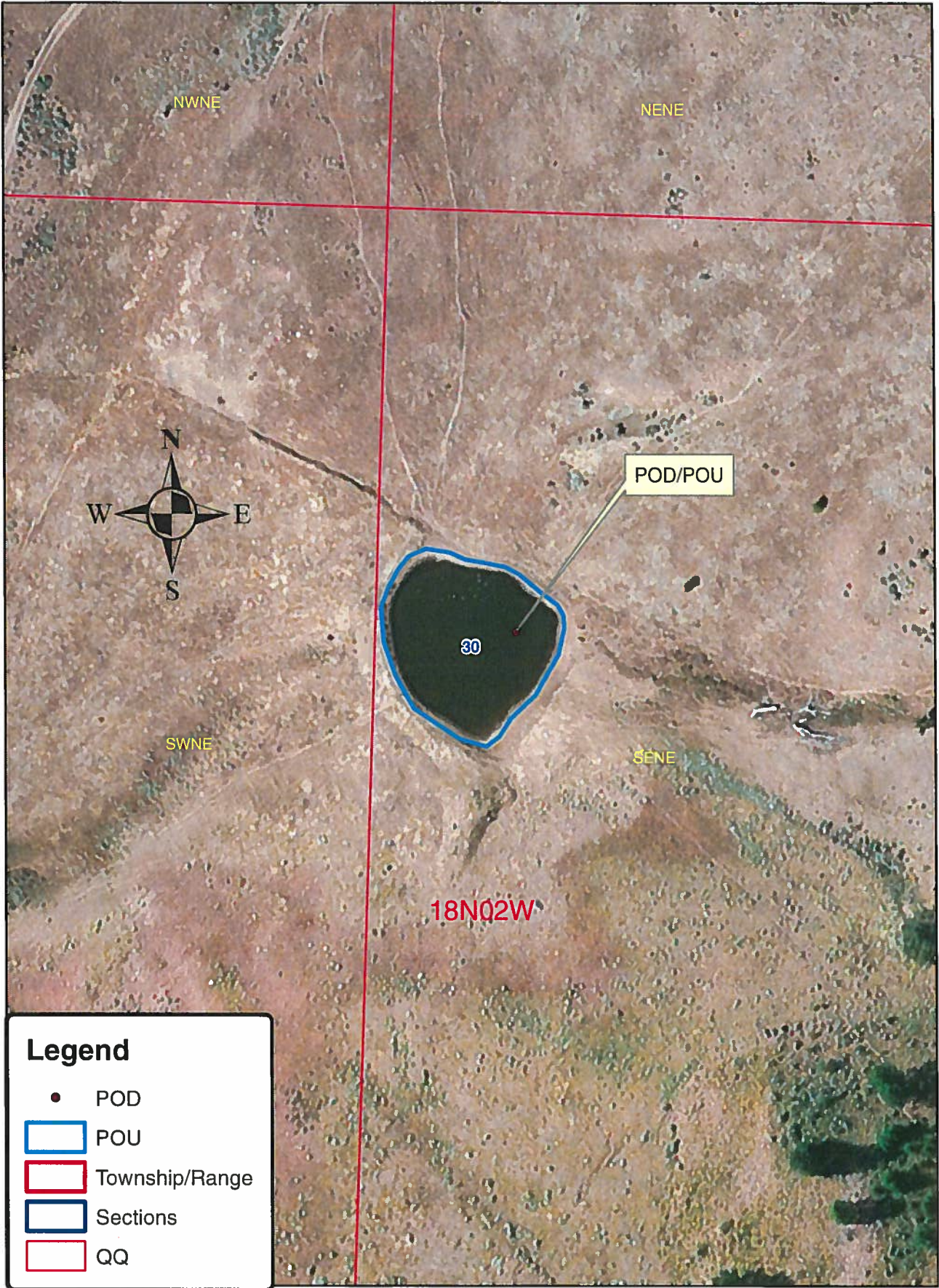
3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached



Scale: 1" = NTS

- ☐ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
- ☒ Aerial photo attached (required for irrigation of 10+ acres)
- ☒ Photo of diversion and system attached

67-15004



**Legend**

- POD
- POU
- Township/Range
- Sections
- QQ

## **FIELD EXAM PHOTOS**

Water Right Permit: 67-15004

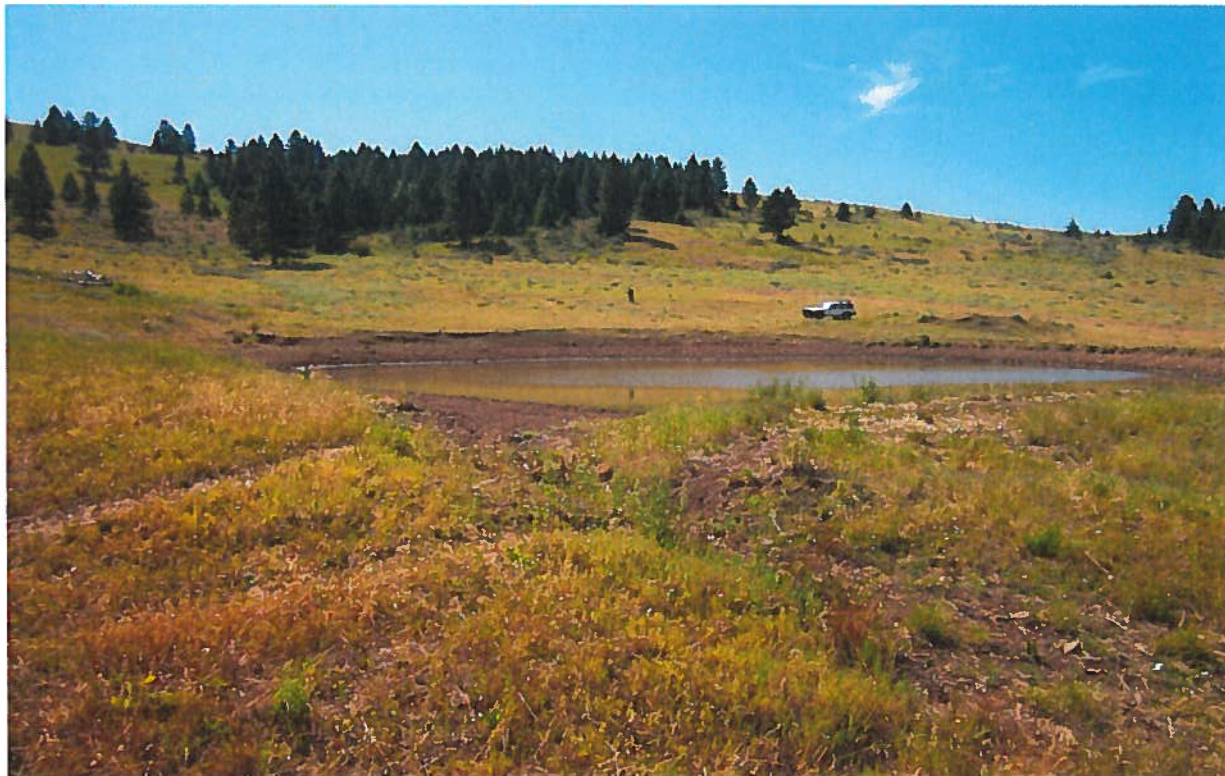
Field Exam Date: 7-17-12

PLS: SE1/4, NE1/4 Section 30, T.18N, R.02W.

Field Examiner: RC



Point of Diversion/Place of Use: View southerly of stock water storage pond. Main source of water is spring in pond. Springs east of pond also supply water to stock water pond.



Point of Diversion/Place of Use: View southeasterly of stock water storage pond spillway.