

[illegible]

Method of Determination: Arc Map (Aerial Photo); Tax Lots.

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>
N/A	N/A	N/A	N/A	N/A	N/A

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
N/A						

2. Measurements: No measuring device on Timber Creek. Performed 'orange peel' velocity measurement to estimate the approximate stream velocity. Calculated flow of 1.4 cfs.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: (Continuity Equation – Stream Channel)

$$Q = VA = 1.0 \text{ ft/sec} \times 1.4 \text{ ft}^2 = 1.4 \text{ cfs}$$

$$V = 1.0 \text{ ft/sec (Orange Peel Method)}$$

$$A (\text{channel}) = 1.4 \text{ ft}^2 (\text{Estimated})$$

$$\text{Width} - 3.5'$$

$$\text{Depth} - 0.4'$$

Appears that Timber Creek has adequate flow capacity to attain the permit diversion rate of 0.02 cfs.

Recommend the permit diversion rate of 0.02 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: (Stock Water – 10 Head of Livestock)

$$V_r = (10 \text{ head} \times 12 \text{ gpd} \times 365 \text{ days/yr}) / 325,850 \text{ gallons} = 0.10 \text{ AFA}$$

$$V_d = (0.02 \times 365 \times 1.9835) = 14.50 \text{ AFA}$$

$$V_r < V_d \quad \text{Recommended Volume of 0.10 AFA}$$

G. NARRATIVE/REMARKS/COMMENTS**WATER SUPPLY SYSTEM:**

Water from Timber Creek is diverted for 'in-stream' stock water for 10 head of cattle and horses. The right holder's break the ice at two specific locations on Timber Creek during the winter months to provide yearround stock water for their livestock.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 65-22781.

Place of Use: There are no place of use overlaps for Water Right Permit No. 65-22781.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.02	&/or	N/A
Beneficial Use Limit	0.02	&/or	N/A
System Measurement	1.4(theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.02	&/or	N/A

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	0.020 CFS	0.10 AFA
<u>Totals:</u>		0.020 CFS	0.10 AFA

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

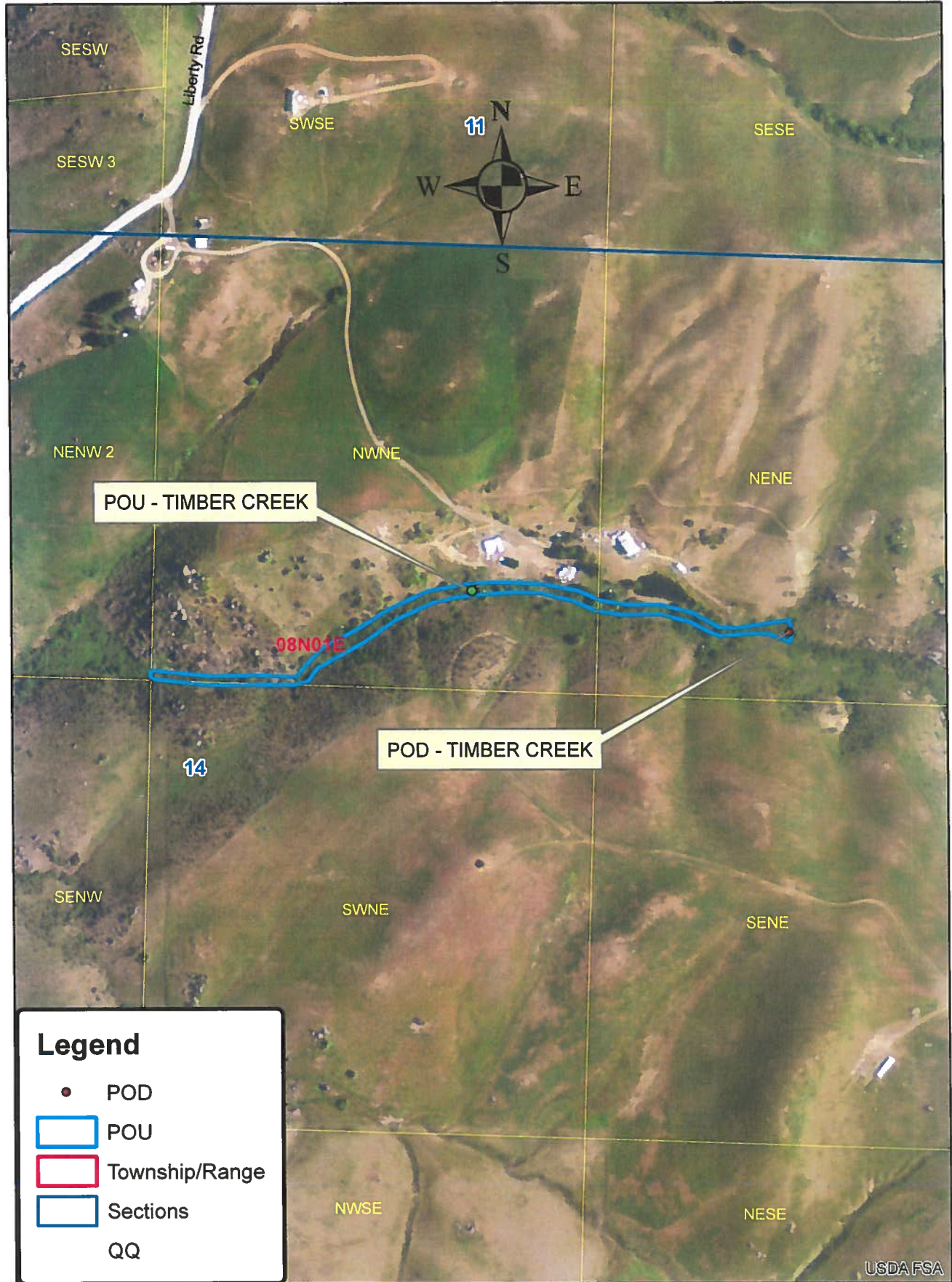
I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 5/29/14

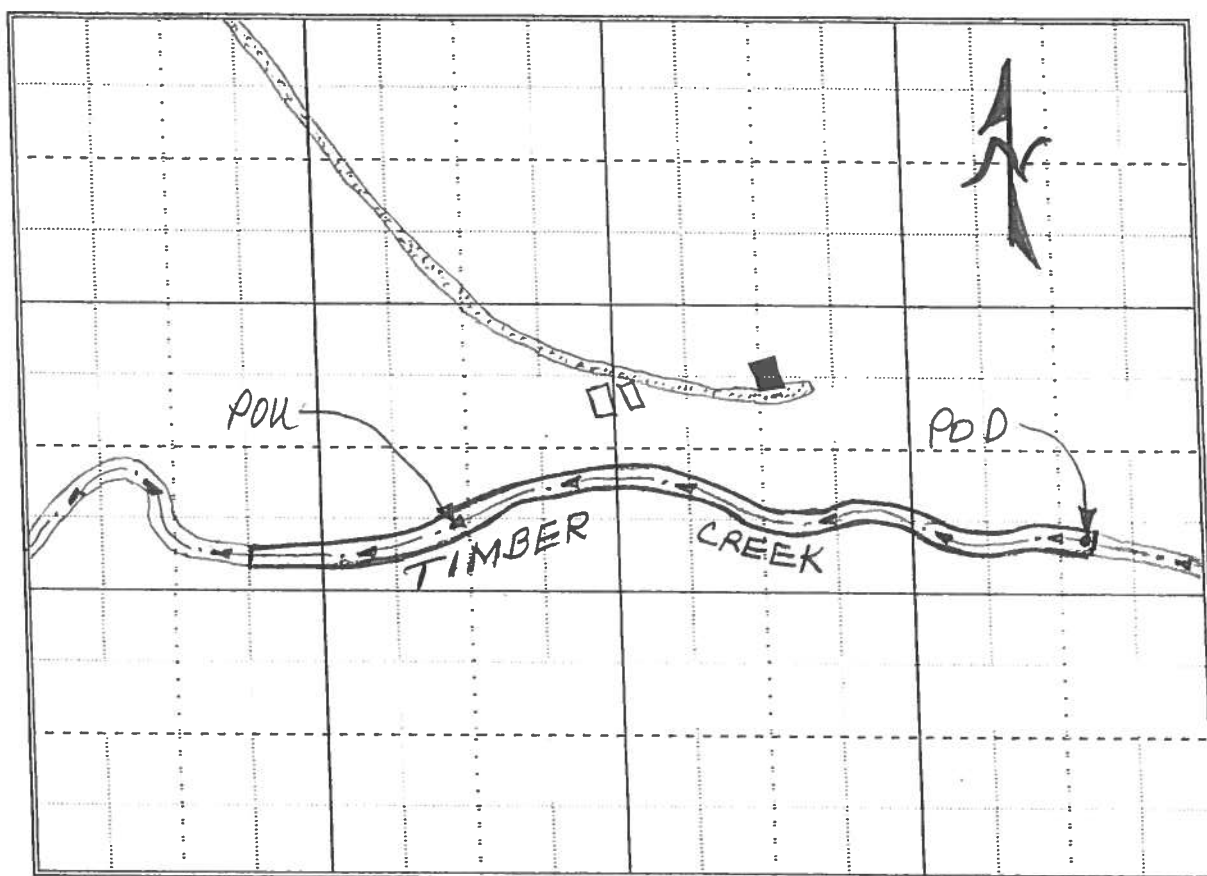
Reviewer _____ Date _____

65-22781

AERIAL PHOTO - 2011



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

FIELD EXAM PHOTOS

Water Right Permit: 65-22781

Field Exam Date: 5-7-14

PLS: NE1/4, NE1/4 Section 14, T.08N, R.01E

Field Examiner: RC



Point of Diversion/Place of Use: View westerly of Timber Creek where the right holder's provide stock water for their livestock. The right holder's keeps this location clear of ice in the winter for the livestock.



Point of Diversion/Place of Use: View southerly of Timber Creek where the right holder's provide stock water for their livestock. The right holder's keep this location clear of ice in the winter for the livestock.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082

PHONE: (208) 334-2190 FAX: (208) 334-2348 www.idwr.idaho.gov

C.L. "BUTCH" OTTER, Governor
April 21, 2014

GARY SPACKMAN, Director

Leon E. & Margaret L. Berggren
P.O. Box 126
Sweet, ID 83670-0126

RE: Scheduling Field Exam for Water Right Permit No. 65-22781

Dear Permit Holder:

The Idaho Department of Water Resources (IDWR) is planning to conduct water right field examinations in the vicinity of the above-referenced permit **during the week of May 12**. An examination is needed to verify water use(s) developed under the permit in order to issue a water right license.

Your permit authorizes the diversion of surface water from Timber Creek for stock water. If you developed a beneficial use of water and still own the place of use property identified in the permit, please contact me at your earliest convenience to schedule an examination.

If you developed a beneficial use of water under the permit but no longer own the place of use property, please use the enclosed Assignment of Permit form (\$25 fee). This will allow IDWR to work with the new permit owner through the water right licensure process.

A water right license cannot be issued if beneficial use of water was not developed or if use was developed but abandoned. If either of these cases has occurred, please relinquish the permit by using the enclosed Relinquishment of Permit form (no fee required). The permit will be voided if a relinquishment form is not submitted within thirty (30) days. If you no longer own the property and do not assign or relinquish your permit, IDWR will work with the current property owner to issue a license or to void the permit.

Please contact me to schedule a field examination for a day and time that is convenient for you. **Please call me at (208) 334-2190 by May 5 to conduct the field exam during the week of May 12.** If there is a problem with scheduling or conducting the field examination at this time, please let me know so we can reschedule.

Please call me at (208) 334-2190 if you have any questions. I appreciate your attention to this matter and look forward to hearing from you.

Sincerely,

Rick Collingwood, P.E.
Staff Engineer

Enclosure: Relinquishment and Assignment of Permit Forms