

[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	1 1/2"

*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 field measurement.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: (Manning's Equation)

$$Q = 1.49/nAR^{2/3}S^{1/2} = (1.49/0.011)(0.012)(0.03)^{2/3}(0.10)^{1/2}$$

$$Q = (135.45)(0.012)(0.095)(0.32) = 0.05 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.05 \text{ cfs} > 0.01 \text{ cfs } Q(\text{permit})$$

$$n = 0.011$$

$$R = D/4 = 0.03$$

$$A = 0.012 \text{ ft}^2$$

$$S = 10\% (0.10 \text{ ft/ft})$$

Appears that the current water supply system can attain the permit diversion rate of 0.01 cfs.

Recommend the permit diversion rate of 0.01 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 – 13 Head of Cattle and Horses)

$$V_r = (13 \times 12 \text{ gpd} \times 365 \text{ days}) / 325,850 \text{ gallons/AF} = 0.17 \sim 0.20 \text{ AFA}$$

$$V_d = (0.01 \times 365 \text{ days} \times 1.9835) = 7.24 \sim 7.2 \text{ AFA}$$

$$V_r < V_d$$

$$V = 0.20 \text{ AFA}$$

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

A spring box of unknown construction is enclosed in a small enclosure. A 1 ½" PVC overflow pipe extends through the easterly wall of the small enclosure.

Spring water is conveyed through 1 ½" PVC pipe to a 500-gallon water storage tank for domestic internal use, and to a frost-free hydrant located in a garden area. Hoses are attached to the frost-free hydrant to water lawn and garden areas, and to fill stock water containers for 1 horse and 12 head of cattle.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 67-14629.

Place of Use: There are no place of use overlaps for Water Right Permit No. 67-14629.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.01	&/or	N/A
Beneficial Use Limit	0.01	&/or	N/A
System Measurement	0.05 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.01	&/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	0.010 CFS	0.20 AFA
DOMESTIC	01/01 to 12/31	0.010 CFS	N/A
<u>Totals:</u>		0.010 CFS	0.20 AFA

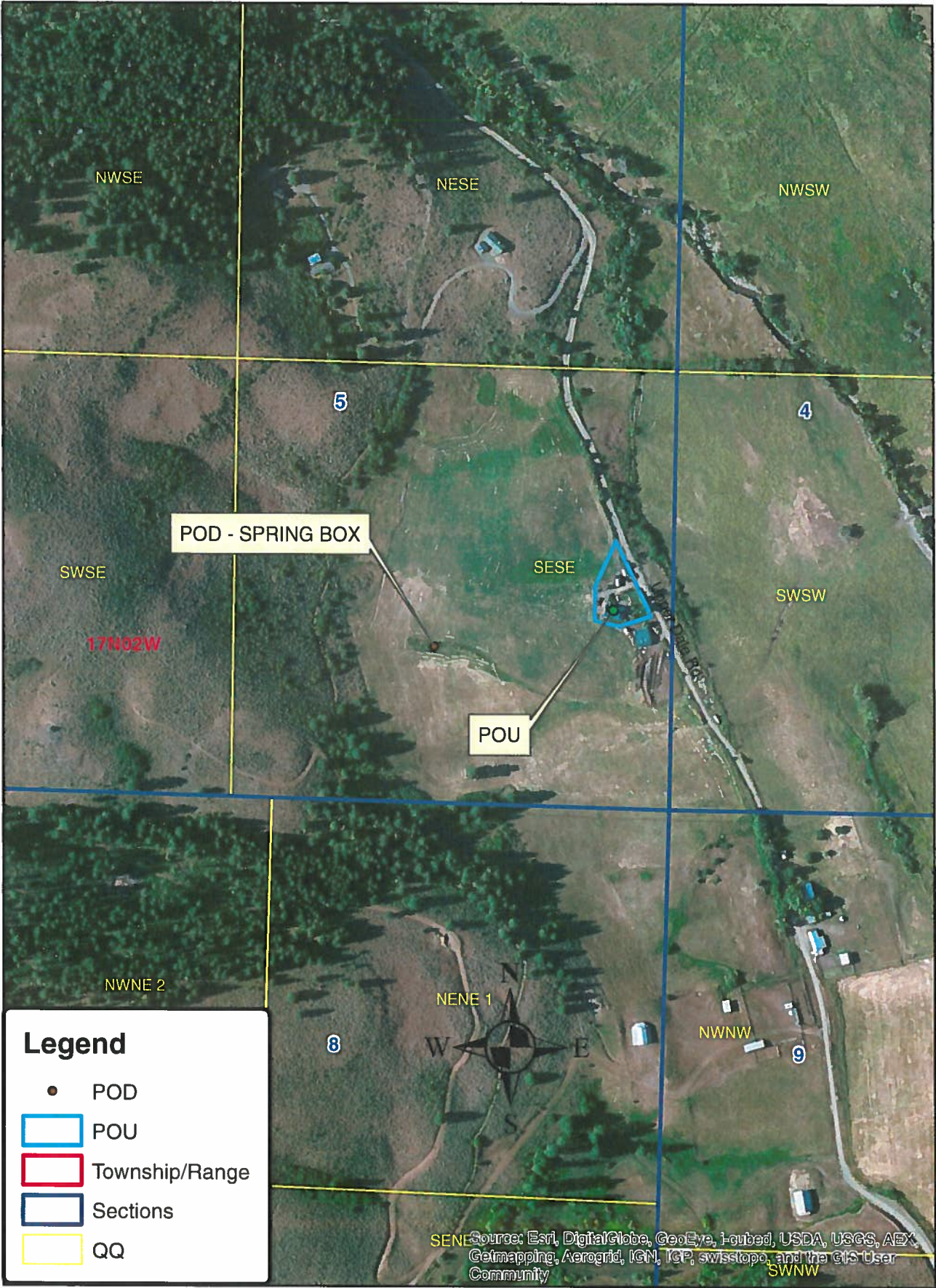
2. Recommended Amendments

___ Change P.D. as reflected above ___ Add P.D. as reflected above X None

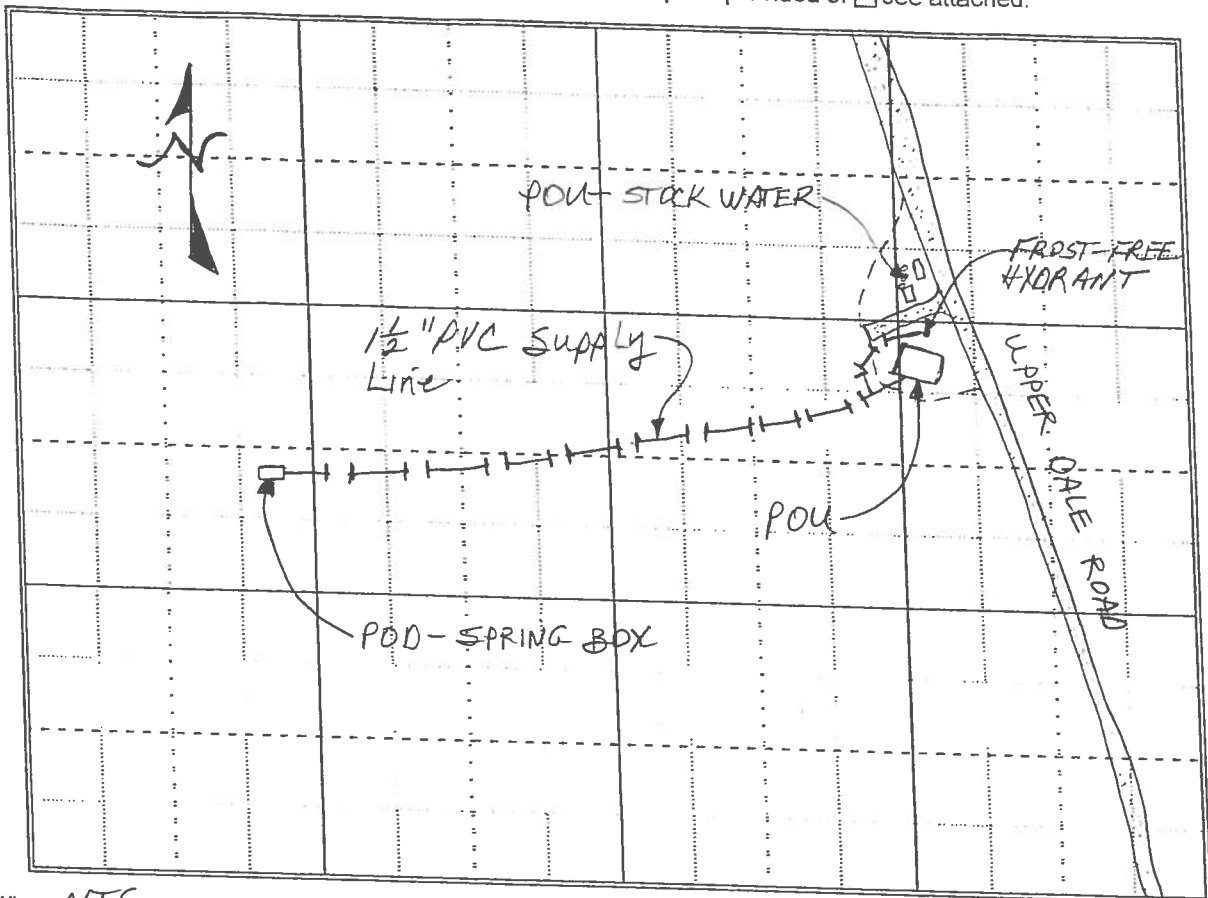
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 11/20/13
 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

FIELD EXAM PHOTOS

Water Right Permit: 67-14629

Field Exam Date: 7-15-13

PLS: SE1/4, SE1/4 Section 5, T.17N, R.02W.

Field Examiner: RC



Point of Diversion: View southwesterly of a small building constructed over the spring box. The spring box has a 1 1/2" PVC overflow pipe extending outside the building.



Place of Use: View southerly of the home and lawn and garden areas served by the spring. Water for domestic internal use is stored in a 500-gallon water storage tank.



Place of Use: View northeasterly of a frost free hydrant located in the garden area for irrigating the garden and lawn areas.



Place of Use: View of stock water containers to provide drinking water for 1 horse and 12 head of cattle.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

June 21, 2013

Wanda Horton
2525 N. Fork Hornet Creek Road
Council, ID 83612

RE: Scheduling Field Exam for Water Right Permit No. 67-14629

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of July 15, 2013**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal operating conditions during the examination. The permit authorizes the diversion of 0.01 cfs of spring water for stock water for 1 horse and/or 12 range cattle and domestic use for 1 home.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by July 12, 2013, to conduct the exam during the week of July 15, 2013.** If there is a problem with scheduling or conducting the examination at this time, please let me know so we can reschedule or make other arrangements.

I appreciate your attention to this matter and I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink that reads "Rick Collingwood". The signature is written in a cursive, flowing style.

Rick Collingwood, P.E.
Water Resource Agent, Sr.