

A. GENERAL INFORMATION

Exam Date: 5/31/2013

- Or

Relationship to Permit Holder:

- SPRING

TRIBUTARY

GOOSEBERRY CREEK

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 SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

SPRING

SE1/4SE1/4NE1/4

Sec. 15, Twp 09N, Rge 04E, B.M.

BOISE County

Method of Determination: Arc Map (Aerial Photo)

- 2.

PLACE OF USE: STOCKWATER

[illegible]

PLACE OF USE: DOMESTIC

[illegible]

Method of Determination: Arc Map (Aerial Photo)

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	Franklin	1/2	Unknown	Unknown	1 1/4"

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. Pressure tank maintains water pressure to the home and frost free hydrants.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 0.5/20 + (2.31 \times 30) = 3.08/89.3 = 0.04 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.04 \text{ cfs} < 0.06 \text{ cfs } Q(\text{permit})$$

$$HP = \frac{1}{2}$$

$$Z = 20' \text{ (Estimated)}$$

$$P = 30 \text{ psi (Assumed)}$$

Appears that the current pumping system cannot attain the permit diversion rate of 0.06 cfs. Recommend the theoretical pumping capacity of 0.04 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 – 5 Horses)

$$V_r = (5 \times 12 \times 365) / 325,850 = 0.07 \sim 0.10 \text{ AFA}$$

$$V_d = 0.04 \times 365 \times 1.9835 = 29.0 \text{ AFA}$$

$$V_r < V_d, \quad \text{Recommended Volume: } V = 0.10 \text{ AFA}$$

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

A 12' section of 3' diameter perforated plastic pipe, which serves as the spring box, collects spring water for domestic use for one home, and stock water for five (5) horses. The 3' diameter spring box is encased in drain rock. A 1/2-hp pump diverts water from the spring box through a 1 1/4" PVC supply line to one home and four (4) frost free hydrants. Hoses are attached to the frost free hydrants to provide water for irrigation of the right holder's lawn and landscaping, and to fill watering troughs for the horses.

OVERLAP ANALYSIS:

Point of Diversion & Place of Use: There are no point of diversion or place of use overlaps for Water Right Permit No. 65-22985.

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

CONDITON NO.2: Prior to diversion of water, the right holder shall install a lockable device. The right holder's springs box, pump, and electrical controls, are located in a locked spring/pump house. Right holder has complied with Condition No.2.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.06	&/or	N/A
Beneficial Use Limit	0.06	&/or	N/A
System Measurement	0.04 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.04	&/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
DOMESTIC	01/01 to 12/31	0.040 CFS	~~N/A~~ 1.24 AFA RC 10/10/13
<u>Totals:</u>		0.040 CFS	0.10 AFA 1.30 RC 10/10/13

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

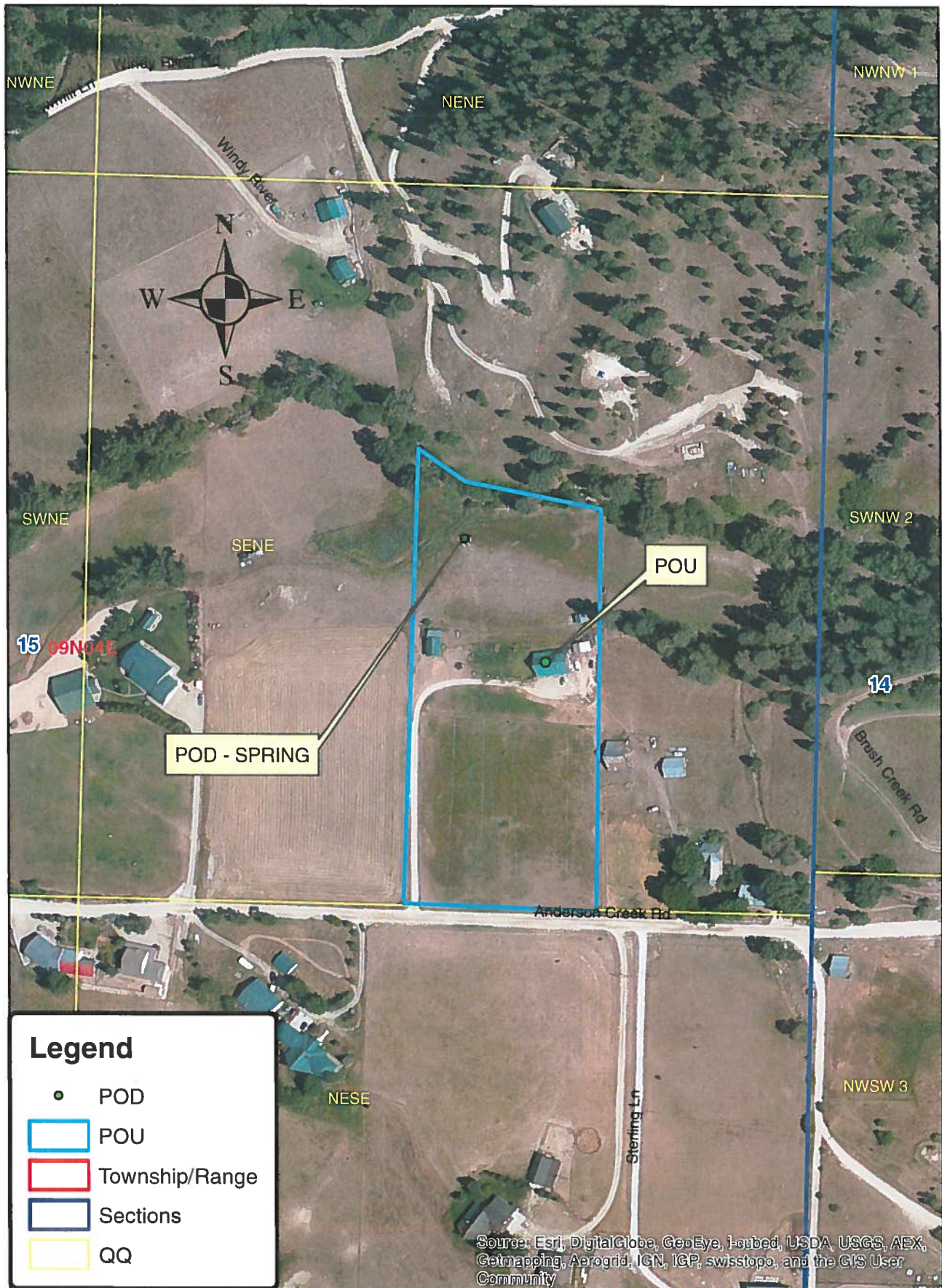
I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 10/10/13

Reviewer _____ Date _____

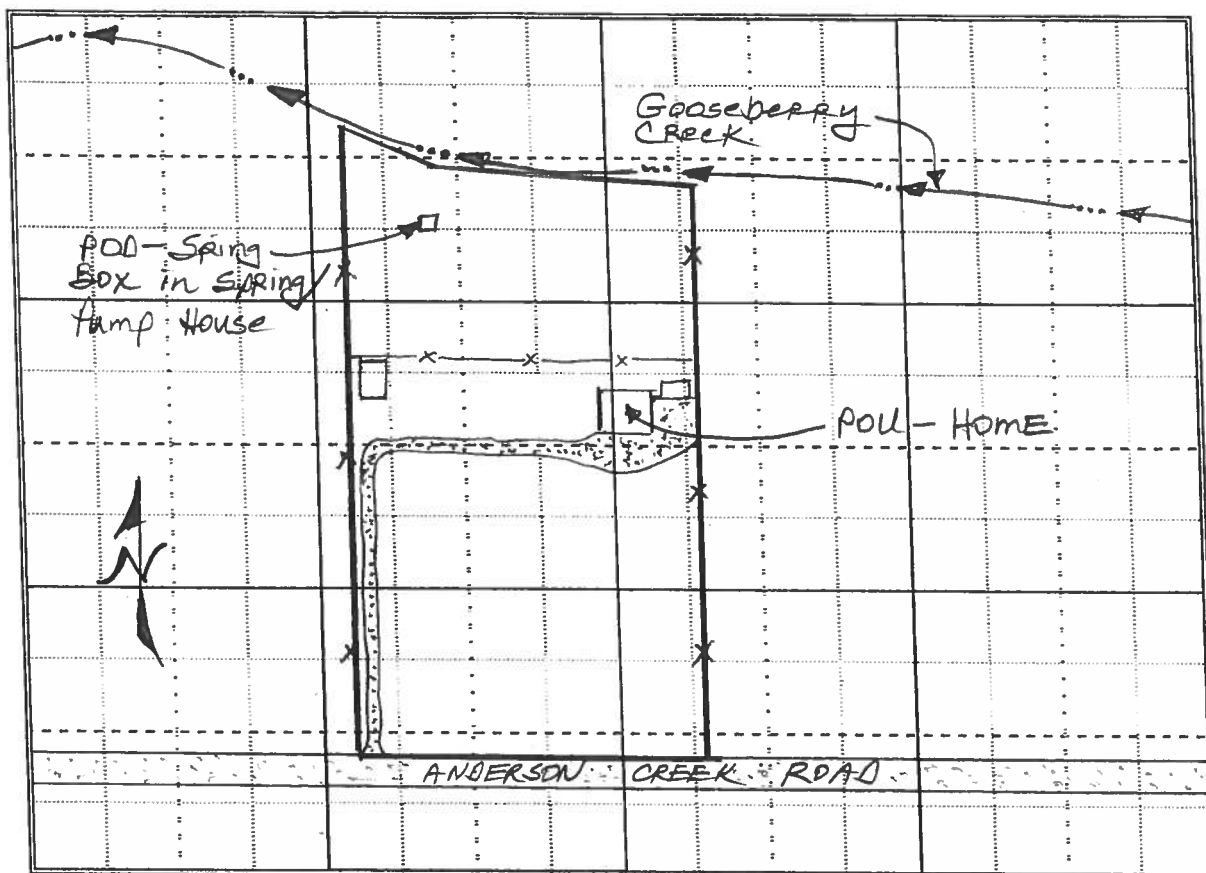
65-22985

ESRI AERIAL PHOTO - 2012



0 80 160 320 480 640
Feet

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: 65-22985

Field Exam Date: 5-31-13

PLS: NW1/4, SW1/4 Section 14, T.9N, R.04E.

Field Examiner: RC



Point of Diversion: View northwesterly of the spring/pump house. A ½-hp pump discharges spring water through 1 ¼" PVC pipe to a house and four (4) frost free hydrants. The frost free hydrants are used to attach hoses for filling stock water troughs and irrigation of lawn and landscaping.



Place of Use: View easterly of the home which is served by the spring for domestic use.



Point of Diversion: View of the 3' diameter plastic pipe spring box and the 1 1/4" PVC discharge piping located in the spring/pump house. The perforated spring box is 12' deep and is encased in drain rock.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

May 15, 2013

Warren & Melea Hileman
56 Anderson Creek Road
Garden Valley, ID 83622

RE: Scheduling Field Exam for Water Right Permit No. 65-22985

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of May 27, 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 0.06 cfs of water from a spring for domestic use for one home and stock water for 5 horses.

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 May 24, 2013, to conduct the exam during the week of May 27, 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.