

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-8044

Exam Date: 8/20/2012

1. Current Owner: BILLIE A. STIPPICH
449 E COURT
WEISER ID 83672
(208)549-0163
2. Accompanied by: Joe Stippich
Phone No: (208) 355-2208
Address: 2195 Hanthorn Road, Indian Valley, ID 83632
Relationship to Permit Holder: Son

3. SOURCE

SPRING

TRIBUTARY

JOHNSON 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 NE1/4SE1/4NW1/4 Sec. 15, Twp 16N, Rge 02W, B.M.
ADAMS County

Method of Determination: Arc Map (Aerial Photo)

2.

PLACE OF USE: STOCKWATER

[illegible]

(Trough Location)

Method of Determination: Arc Map (Aerial Photo); GPS Latitude N.44°43.801', Longitude W.116°34.029'; Datum – NAD83.

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	(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>
5-gallon bucket						

2. Measurements: 5 – gallon bucket. Measured flow of 15 gpm, or approximately 0.04 cfs. Measured flow was from a 1 1/4" steel overflow pipe, which is smaller than the 1 1/2" supply line from the spring box. Therefore, measured flow may be lower than the 1 1/2" supply line to the watering trough.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: (Continuity Equation – Pipe Flow)

$$V = 1.49/nR^{2/3}S^{1/2} = (1.49/0.013)(0.031)^{2/3}(0.06)^{1/2}$$

$$V = (114.62)(0.098)(0.245) = 2.8 \text{ ft/sec}$$

$$Q = VA = 2.8 \text{ ft/sec} \times 0.012 \text{ ft}^2 = 0.034 \text{ cfs (Use 0.04 cfs)}$$

$$A(1 \frac{1}{2}" \text{ pipe}) = 0.012 \text{ ft}^2$$

$$\Delta E = 80' \text{ (Estimated)}$$

$$n = 0.013$$

$$R = D/4 = 0.125'/4 = 0.031'$$

$$S = 80'/1300' = 0.06 \text{ ft/ft}$$

Assuming a flow velocity of 5 ft/sec, the pipe flow capacity of a 1 1/2" diameter pipe equals 0.07 cfs.

$$Q(\text{measured}) = 0.04 \text{ cfs} < 0.05 \text{ cfs (permit)} < 0.07 \text{ cfs (pipe capacity)}$$

Although the measured flow was less than the beneficial use permit diversion rate of 0.05 cfs, which could possibly be due to a smaller diameter overflow pipe, it appears that the conveyance system is capable of attaining the permit diversion rate of 0.05 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)

100 cattle & 4 horses – 12 gpd/animal

$$V_r = (104 \times 12 \text{ gpd} \times 365 \text{ days}) / 325,850 \text{ gallons} = 455,520 / 325,850 = 1.4 \text{ AFA}$$

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

$V_r < V_d$, recommend $V_r = 1.4 \text{ AFA}$

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

A 3-foot diameter spring box, with a lockable steel lid, collects spring water for discharge to a large 'tire' watering trough. The spring box is located approximately 1,300-feet southerly of the watering trough. Approximately 1,400 lineal feet of 1 ½" PVC pipe conveys the spring water to the watering trough.

PLACE OF USE:

A large 'tire' watering trough provides drinking water for 100 cattle and 4 horses. The watering trough has a 1 ¼" steel overflow pipe, which discharges to a natural drainage swale and percolates into the soil.

No dwellings (permanent or temporary), have ever been constructed or relocated to the site. Although a frost-free hydrant exists on the site, no domestic beneficial use has ever been exercised by the right holder. Therefore, domestic use shall be removed prior to licensing.

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

CONDITION NO.2 (01J) – Prior to diversion of water under this right, the right holder shall install and maintain a measuring device and lockable controlling works. The spring box has a shutoff mechanism within the spring box, which has a locked steel cover. The locked steel cover complies with the condition of approval requiring the installation of a lockable controlling works. At the request of the right holder, on August 29, 2005, the Department Director issued an order waiving the requirement for the installation of a measuring device as a condition of approval.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.09	&/or	N/A
Beneficial Use Limit	0.09	&/or	N/A
System Measurement	0.04	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.05	&/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	1/01 to 12/31	0.050 CFS	1.4 AFA
<u>Totals:</u>		0.050 CFS	1.4 AFA

2. Recommended Amendments

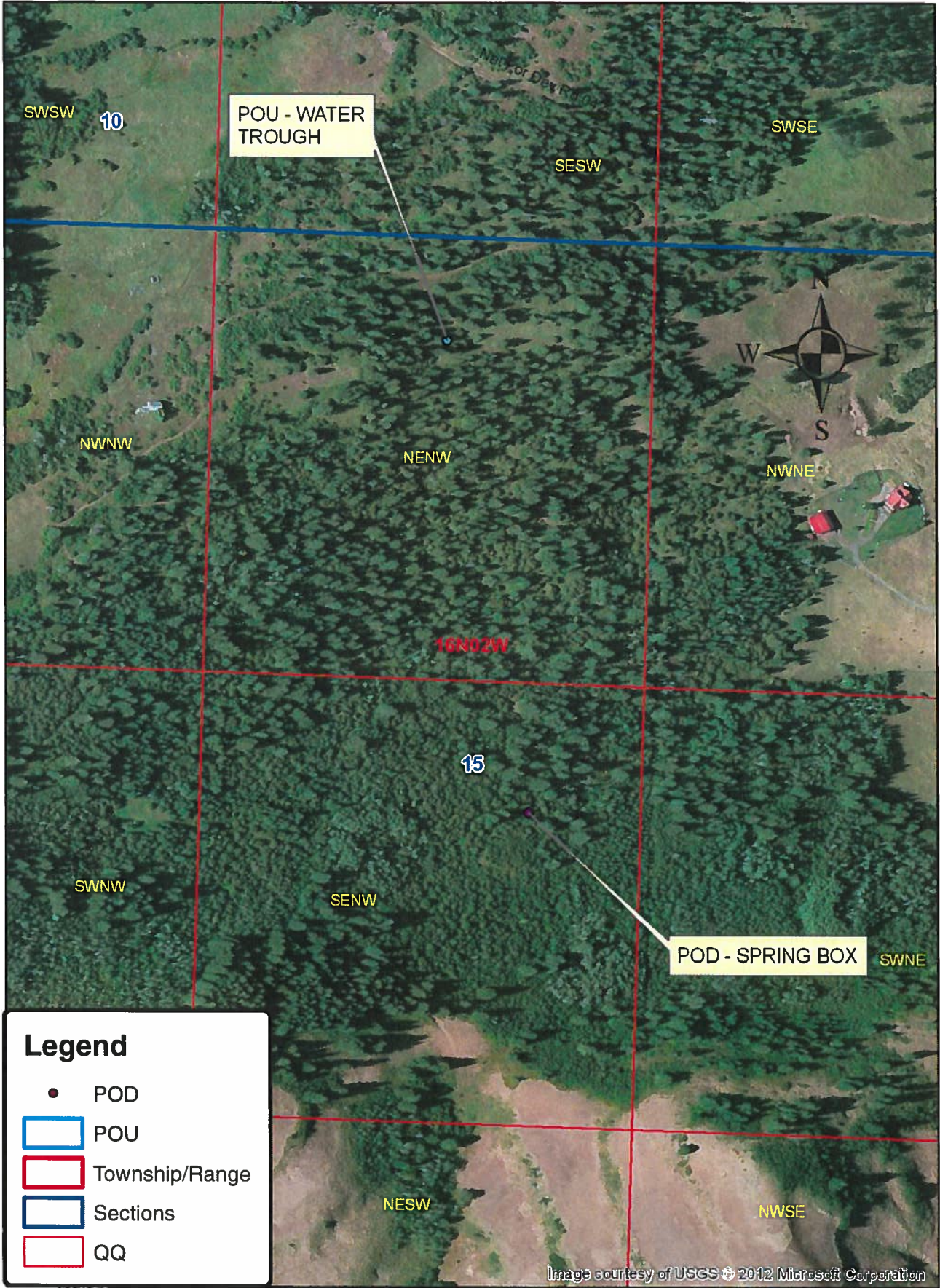
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

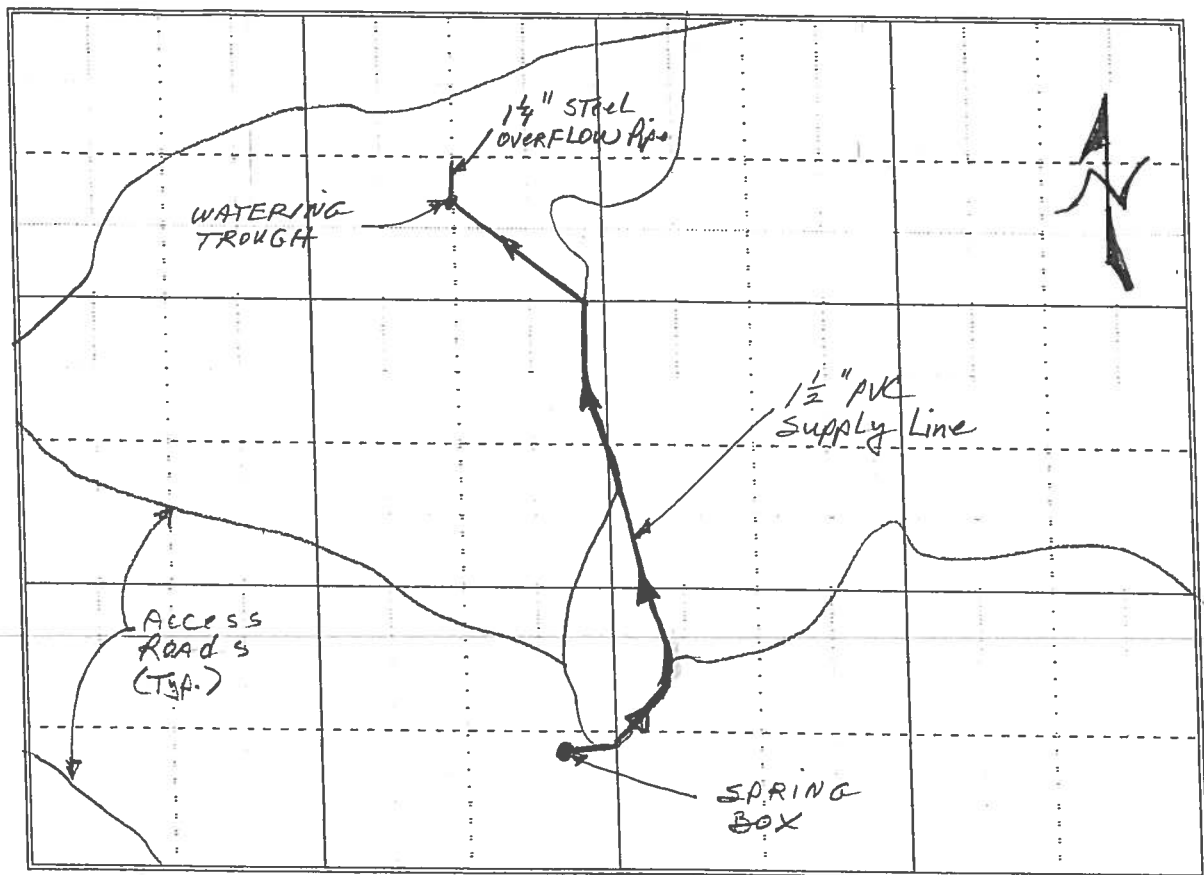
Field Examiner's Name Rick Collingwood Date 12/19/12

Reviewer _____ Date _____



0 137.5 275 550 825 1,100
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: 67-8044

Field Exam Date: 8-20-12

PLS: NE1/4, NW1/4 Section 15, T.16N, R.02W.

Field Examiner: RC



Point of Diversion: View of 3-foot diameter spring box. The spring box is sealed with a lockable steel lid.



Place of Use: Stock water trough. Spring water is discharged through a standpipe in the center of the water trough.



View easterly of the 1 ¼" galvanized steel water trough overflow pipe. The overflow is conveyed in a natural swale and percolates downstream into the soil.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

August 9, 2012

Mrs. Kermit Stippich
449 E. Court
Weiser, ID 83672

RE: Scheduling Field Exam for Water Right Permit No. 67-8044

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of August 20, 2012**. 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 0.09 cfs from a spring for domestic use for one home and stock water for 100 head of cattle and 4 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 August 17, 2012, to conduct the exam during the week of August 20, 2012.** 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.