

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 78-12318

Exam Date: 8/14/2013

1. Current Owner: JACK WOLFORD
5541 HWY 95 S
POLLOCK ID 83547
(208)628-3488
2. Accompanied by: Jack Wolford
Phone No: Same
Address: Same
Relationship to Permit Holder:

3. **SOURCE**

UNNAMED STREAM

TRIBUTARY

LITTLE SALMON RIVER

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 SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM	NE1/4SE1/4	Sec. 16,	Twp 22N,	Rge 01E, B.M.
ADAMS County				
UNNAMED STREAM	NE1/4SE1/4	Sec. 16,	Twp 22N,	Rge 01E, B.M.
ADAMS County				

Method of Determination: Arc Map (Aerial Photo)

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
22N	01E	16				2.0									2.0				4.0

Total Acres: 4

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
22N	01E	16				X									X				

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 1/4"

*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. Right holder was not irrigating at the time of the field exam. Flows in the Unnamed Stream were low, so normal operation of the irrigation system may have not been attainable.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: (Continuity Equation)

$$Q = VA = 5 \text{ ft/sec} \times 0.009 \text{ ft}^2 = 0.045 \text{ cfs (POD \#1)}$$

$$Q = VA = 5 \text{ ft/sec} \times 0.009 \text{ ft}^2 = 0.045 \text{ cfs (POD \#2)}$$

$$Q(\text{theoretical}) = 0.09 \text{ cfs} < 0.14 \text{ cfs } Q(\text{permit})$$

$$V = 5 \text{ ft/sec (Assumed)}$$

$$A = 0.009 \text{ ft}^2$$

Appears that the current water supply system cannot attain the permit diversion rate of 0.14 cfs.

Recommend the theoretical system capacity diversion rate of 0.09 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.0 \times 3.0 = 12.0 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.09 \times 214 \times 1.9835 = 38.2 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 12.0 \text{ AFA}$$

2. Volume Calculations for Other Uses: Stock Water – 6 Head of Cattle & 4 Horses

$$V_r = (10 \times 12 \times 365) / 325,850 = 0.13 \sim 0.10 \text{ AFA}$$

$$V_d = 0.02 \times 365 \times 1.9835 = 14.5 \text{ AFA}$$

$$V_r = 0.10 \text{ AFA} < V_d = 14.5 \text{ AFA}$$

$$V = 0.10 \text{ AFA}$$

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

The right holder diverts water at two (2) points of diversion from an Unnamed Stream for irrigation of 4.0 acres of pasture and lawn, and stock water for six (6) head of cattle and four (4) horses. The two 1 ¼" PVC supply lines 'tee' into a single 1 ¼" PVC supply line. An additional 'tee' directs flow to a spigot near the right holder's home. An additional spigot is located at the end of the 1 ¼" PVC supply line at the northern end of the right holder's property.

IRRIGATION & STOCK WATER:

The pasture and lawn areas are sprinkler irrigated by hoses attached to the two spigots. Stock Water troughs are filled by hoses attached to the spigots.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 78-12318.

Place of Use: There are no place of use overlaps for Water Right Permit No. 78-12318.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.14	&/or	N/A
Beneficial Use Limit	0.14	&/or	N/A
System Measurement	0.09(theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.09	&/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>
IRRIGATION	04/01 to 10/31	0.090 CFS	12.0 AFA
STOCKWATER	01/01 to 12/31	0.020 CFS	0.1 AFA
<u>Totals:</u>		0.090 CFS	12.1 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

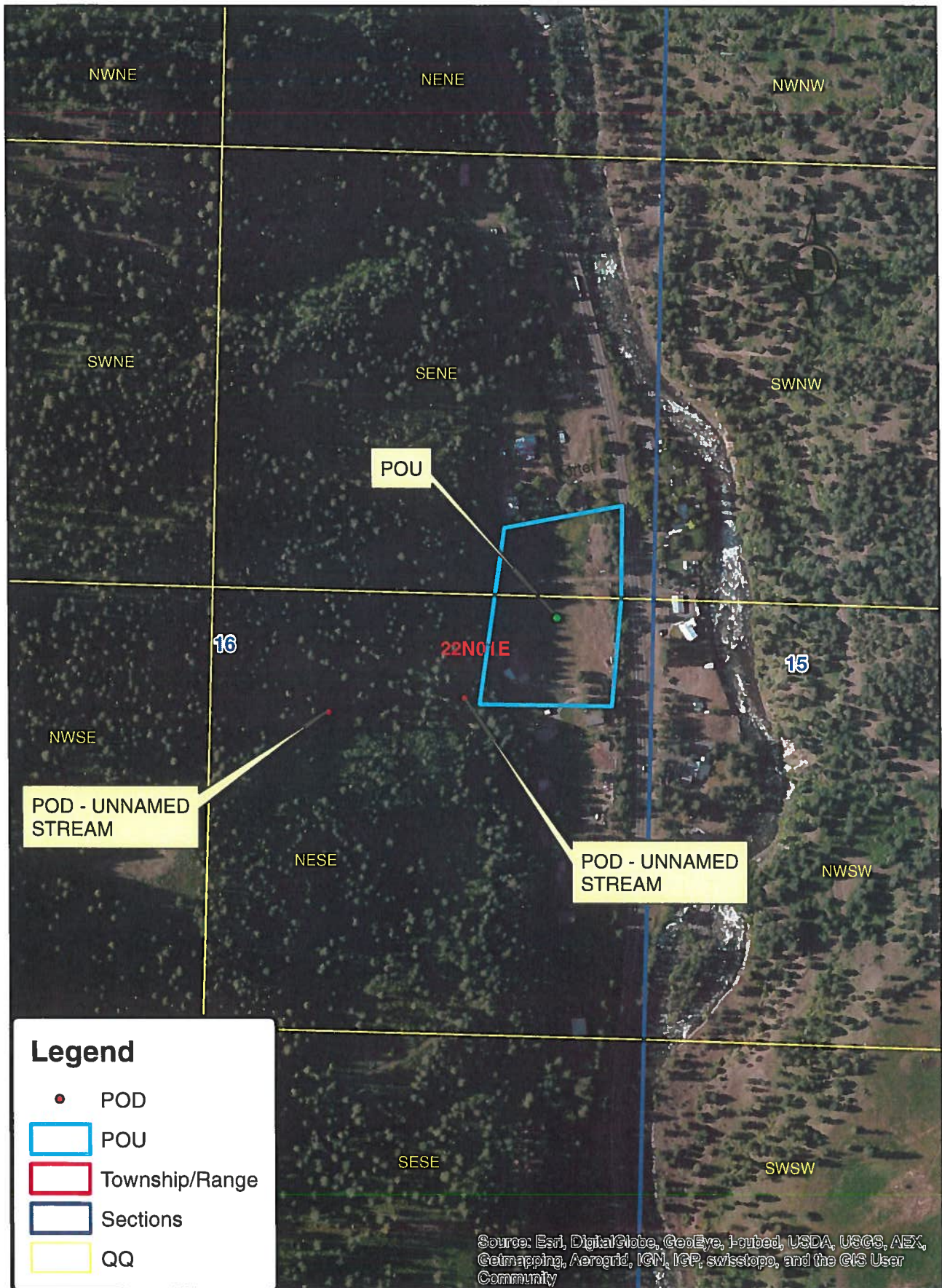
I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 1/2/14

Reviewer _____ Date _____

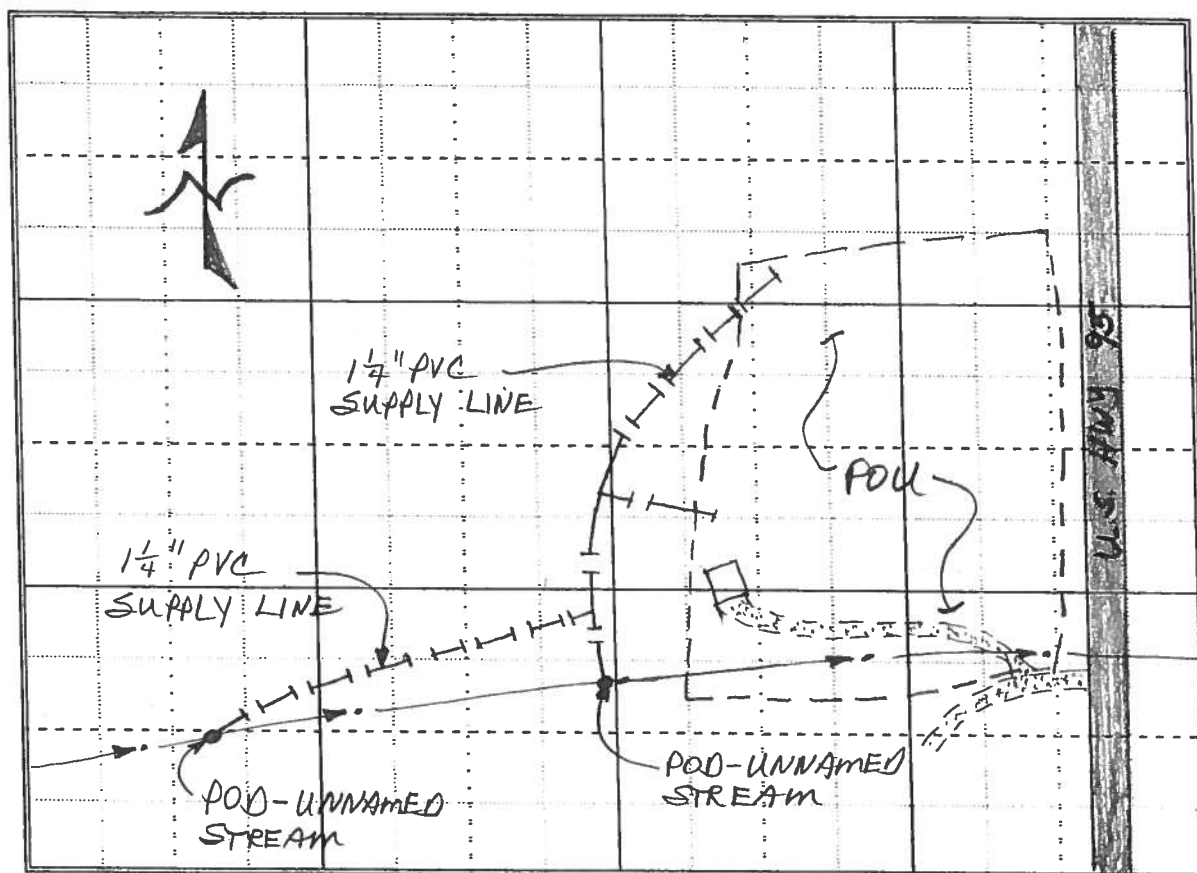
78-12318

ESRI AERIAL PHOTO - 2012



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: 78-12318

Field Exam Date: 8-14-13

PLS: NE1/4, SE1/4 Section 26, T.22N, R.01E

Field Examiner: RC



Point of Diversion: View from the top of a 42" CMP culvert which conveys water from an Unnamed Stream across a trail/road. The right holder has installed a sheet metal channel to convey water from the culvert to a plastic 3' diameter screened water storage tank.



Point of Diversion: View southwesterly of the 3' diameter by 2' high screened water storage tank. Water is discharged through 1 1/4" PVC pipe to the right holder's irrigation system.



Point of Diversion: View westerly of a 3' diameter by 2' deep water storage tank. Water is diverted from an Unnamed Stream through two 1 1/4" PVC pipes. Water is discharged from the water storage tank through 1 1/4" PVC to the right holder's irrigation system.



Place of Use: View northeasterly of the pasture area irrigated by the right holder. The right holder irrigates with hoses and various types of sprinklers.



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

July 25, 2013

Jack Wolford
5541 Hwy 95 S
Pollock, ID 83547

RE: Scheduling Field Exam for Water Right Permit No. 78-12318

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of August 12, 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 0.14 cfs from an unnamed stream for irrigation of 4.0 acres and stock water for 14 head of cattle and 6 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 2, 2013, to conduct the exam during the week of August 12, 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,

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