

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 2-10303

Exam Date: 6/15/2012

1. Current Owner: M GARLAND SMITH
5476 MARKET RD
MARSING ID 83639
(208)896-4324

GARLAND SMITH TRUST
5476 MARKET RD
MARSING ID 83639
(208)896-4324

ZOLA SMITH
5476 MARKET RD
MARSING ID 83639
(208)896-4324

2. Accompanied by: Garland & Zola Smith
Phone No: (208) 896-4324
Address: 5476 Market Road, Marsing, ID 83639
Relationship to Permit Holder:

3. SOURCE
SNAKE RIVER

TRIBUTARY
COLUMBIA RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Gem Irrigation District
2. Other water rights with the same point of diversion: 02-10304

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

SNAKE RIVER L7 NW1/4SE1/4 Sec. 18, Twp 03N, Rge 04W, B.M.
OWYHEE 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	
03N	04W	18														2.2	.3		2.5
																L 7			

Total Acres: 2.5

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>
	Century AC	2	246073	Red Lion	2708 Code # 614673 (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 43 gpm (0.10 cfs).

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: 5-Gallon Bucket

Q = 43 gpm (0.10 cfs)

Q(Pump Ratings): 10 psi = 89 gpm (0.20 cfs); 20 psi = 69 gpm (0.15 cfs); 30 psi = 60 gpm (0.13 cfs);
40 psi = 36 gpm (0.08 cfs);

Q(measured) = 0.10 cfs < 0.12 cfs Q(permit). Based on measured flow and pump ratings, appears that the selected pump can attain the permit requested flow of 0.12 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.5 \times 4.5 = 11.3 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.08 \times 260 \times 1.9835 = 41.3 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 11.3 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS**PUMPING SYSTEM:**

A portable 2hp pump is used to divert water from the Snake River to irrigate approximately 2.5 acres of pasture and trees. The surface water is captured in an intake structure (barrel) located approximately 40' from the river bank. Water is pumped from the intake structure through a 2-inch PVC suction line. The portable pump is operated by a portable generator.

CONVEYANCE SYSTEM:

The pump discharges water through a 1 ½-inch PVC pipe to an irrigation ditch. The irrigation ditch is dammed to flood irrigate the pasture and trees. The portion of land north of the irrigation ditch is not irrigated due to the proximity of the ditch to the river bank. The right holder has surface water rights from the Gem Irrigation District, but according to the right holder, their parcel is located at the end of the service area, and the water supply is inadequate in which to irrigate the pasture land and trees. The ditch did contain a small amount of water during the field exam, which substantiates the right holders claim of an inadequate supply of water.

OVERLAP (POD):

A parcel of land to the east, associated with Water Right Permit No. 02-10304, is irrigated from water diverted by the same pumping and conveyance system used for Water Right Permit No. 02-10303. When combining both water rights, the diversion rate of 0.17 cfs exceeds the system capacity of 0.10 cfs. Therefore, when the water rights are combined, they shall be limited to the system capacity of 0.10 cfs.

PLACE OF USE:

Approximately 2.5 acres is irrigated by the current pumping and conveyance system, not the 3.9 acres as indicated on the permit. The 3.9 acres is the size of Parcel No. 3, which comprises the irrigated 2.5 acres. Since the actual acres of irrigation is 2.5 acres, not 3.9 acres, the recommended diversion rate shall be 0.08 cfs, not 0.12 cfs as requested on the permit.

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

CONDITION NO.5 (046):

Permit holder did not proceed with drilling/excavation of sump for pumping of irrigation water. Only diversion is surface water from the Snake River.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.12	&/or	18.0
Beneficial Use Limit	0.08	&/or	12.0
System Measurement	0.10	&/or	11.3
Proof Fee Amount	0.20	&/or	20.0
Recommended Amount	0.08	&/or	11.3

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	0.08 CFS	11.3 AFA
<u>Totals:</u>		0.08 CFS	11.3 AFA

2. Recommended Amendments

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

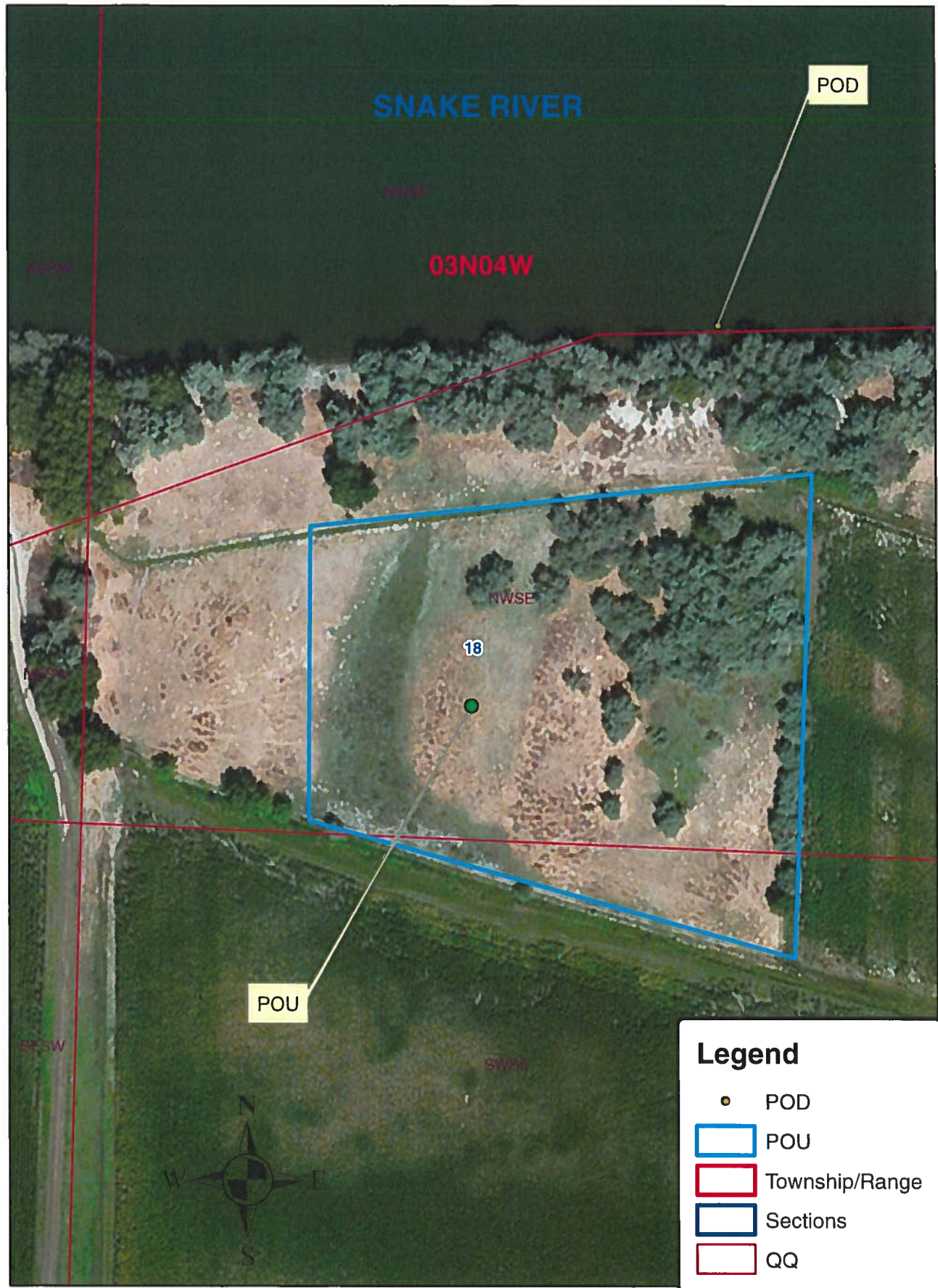
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

I. AUTHENTICATION

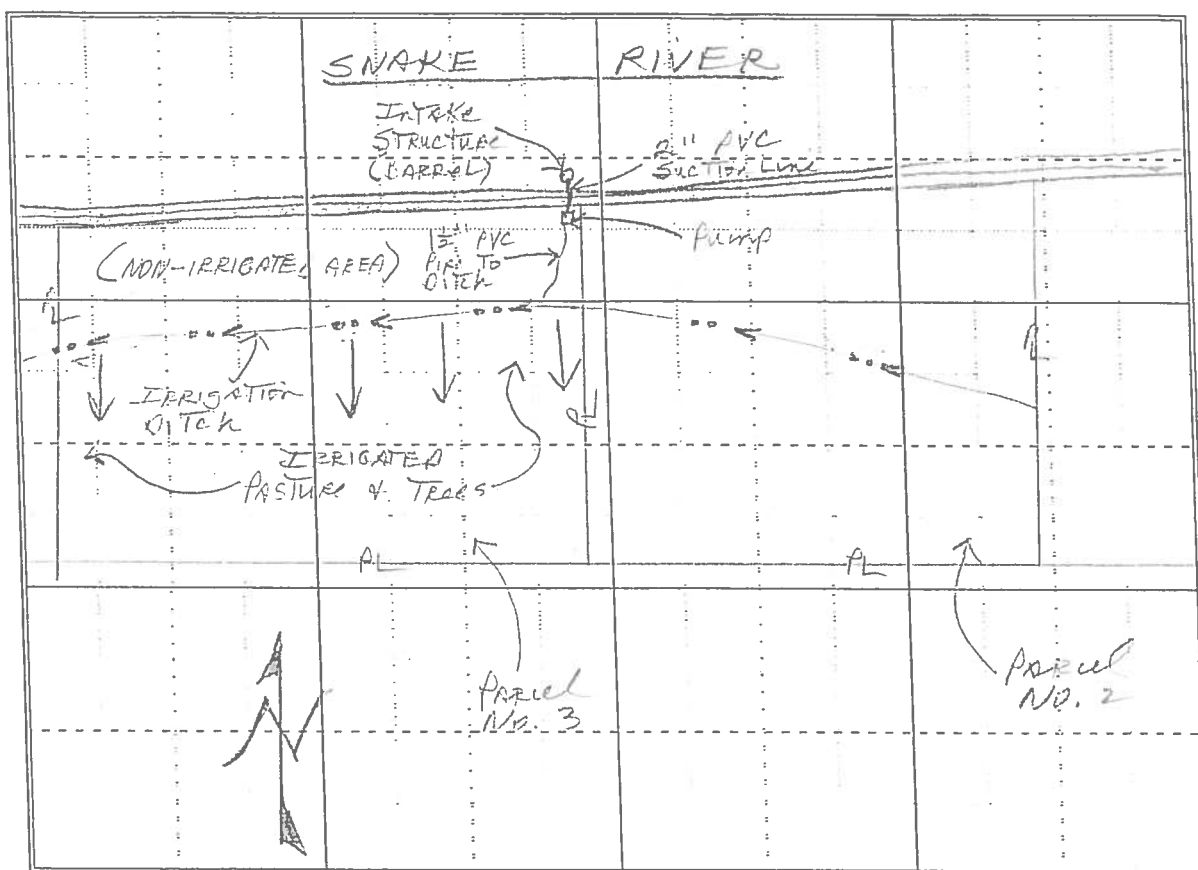
Field Examiner's Name *Rick Collingwood* Date 10-2-12

Reviewer _____ Date _____

02-10303
Gov't. Lot 7



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" = 100 FT

- ☐ 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: 02-10303

Field Exam Date: 6-15-12

PLS: NW1/4, SE1/4 Section 18, T.3N, R.4W.

Field Examiner: RC



Point of Diversion: View northerly of 2" PVC suction line to submerged intake structure (barrel), 2 hp pump, and 1 1/2" PVC discharge line.



Place of Use: View southwesterly of pasture and trees.