

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-14380

Exam Date: 6/4/2012

1. Current Owner: LESLIE G DAVIS
2251 N GRAYS RD
INDIAN VALLEY ID 83632
(208) 382-5020

And/Or

KATHLEEN A DAVIS
2251 N GRAYS RD
INDIAN VALLEY ID 83632
(208) 382-5020

2. Accompanied by: Leslie Davis
Phone No: (208) 382-5020
Address: 2251 N. Grays Creek Road, Indian Valley, ID 83632
Relationship to Permit Holder:

3. SOURCE

SPRINGS

TRIBUTARY

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

SPRINGS SE1/4SW1/4SE1/4 Sec. 22, Twp 15N, Rge 01W, B.M.
ADAMS County

Method of Determination: Arc Map (Aerial Photo)

2.

PLACE OF USE: STOCKWATER

Twp Rge Sec	NE				NW				SW				SE				Totals
15N 01W 27	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
		X	X														

PLACE OF USE: IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
15N 01W 27	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
		8.0	4.0														10.0
		4.0	6.0														
		KC	KC														

Total Acres: 10

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</u> <u>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</u> <u>Size</u>
N/A					

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>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. Water is checked up in ditch for flood irrigation of pasture. No irrigating at time of field exam.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

$$Q = 0.02 \text{ cfs} \times 10 \text{ acre} = 0.20 \text{ cfs} = Q(\text{permit}).$$

$$Q(\text{open ditch}) = VA$$

$$V = 0.5 \text{ ft/sec (Assumed)}$$

$$A(\text{cross-sectional}) = 3'$$

$$Q = 0.5 \times 3 = 1.5 \text{ cfs} > 0.20 \text{ cfs } Q(\text{Permit})$$

Ditch system was not conveying any water at the time of the exam. However, based on the dimensions of the ditch, approximately 3' wide and 1' deep, and the capacity of the 15" CMP culvert crossing Grays Creek Road which discharges to the ditch, the ditch has adequate capacity in which to convey the permit flow of 0.20 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 10 \times 4 = 40 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.20 \times 246 \times 1.9835 = 97.6 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 40 \text{ afa}$$

2. Volume Calculations for Other Uses: Stock Water

$$V_r = 27 \times 12 \times 365/325,850 = 0.40 \text{ afa}$$

Cattle – 27 head

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

$$V = 0.40 \text{ afa}$$

G. NARRATIVE/REMARKS/COMMENTS**STOCK WATER CONVEYANCE SYSTEM:**

Spring water north of Grays Creek Road is diverted through a 15" culvert beneath Grays Creek Road. The spring water is conveyed southward along Grays Creek Road in a ditch north of the Davis property. The ditch continues southward to the Davis property. The ditch terminates at a small stock water pond. The stock water pond provides water for 27 head of cattle.

IRRIGATION SYSTEM:

The pasture land is flood irrigated. The right holder places a portable dam in the ditch to the stock water pond to flood irrigate sections of the 10 acres of pasture land at a time. The stock water pond overflow provides additional flood irrigation to pasture land south of the stock water pond.

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

Condition No.5 (01J): Requirement to install and maintain a measuring device and lockable controlling works. In April, 2009, the right holder submitted a formal request to remove the measuring device requirement. In May, 2009, Joe Stippich, Basin 67A Watermaster, submitted a letter to the department stating that due to the minimal amount of water, installation of a measuring device would be difficult and would not provide accurate flow data. In June, 2009, the Department submitted a letter to the right holder stating that an order has been issued removing the measuring device requirement, but maintain the condition that a lockable device be installed by the right holder. Contacted Joe Stippich, Basin 67A Watermaster, to discuss the Departments condition requiring a lockable device. Mr. Stippich stated that since no diversion structures exist, such as a spring box or headgate, a lockable device cannot be installed. Mr. Stippich confirmed that the spring discharge is at the surface, and is conveyed to the right holders property by natural topography and man-made drain ditches and culverts. Due to the minimal amount of flow, applicant is required to dam sections of the ditch to flood irrigate the pasture land. Based on the existing natural conveyance system to the right holders property, and the recommendation of the Basin 67A Watermaster, it is recommended that the lockable device requirement in Condition No.5 be removed from the conditions of approval.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.20	&/or	N/A
Beneficial Use Limit	0.20	&/or	N/A
System Measurement	1.5(theoretical – open channel)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.20	&/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	0.40
IRRIGATION	03/15 to 10/31	0.200 CFS	40.0
<u>Totals:</u>		0.200 CFS	40.4

2. Recommended Amendments

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

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

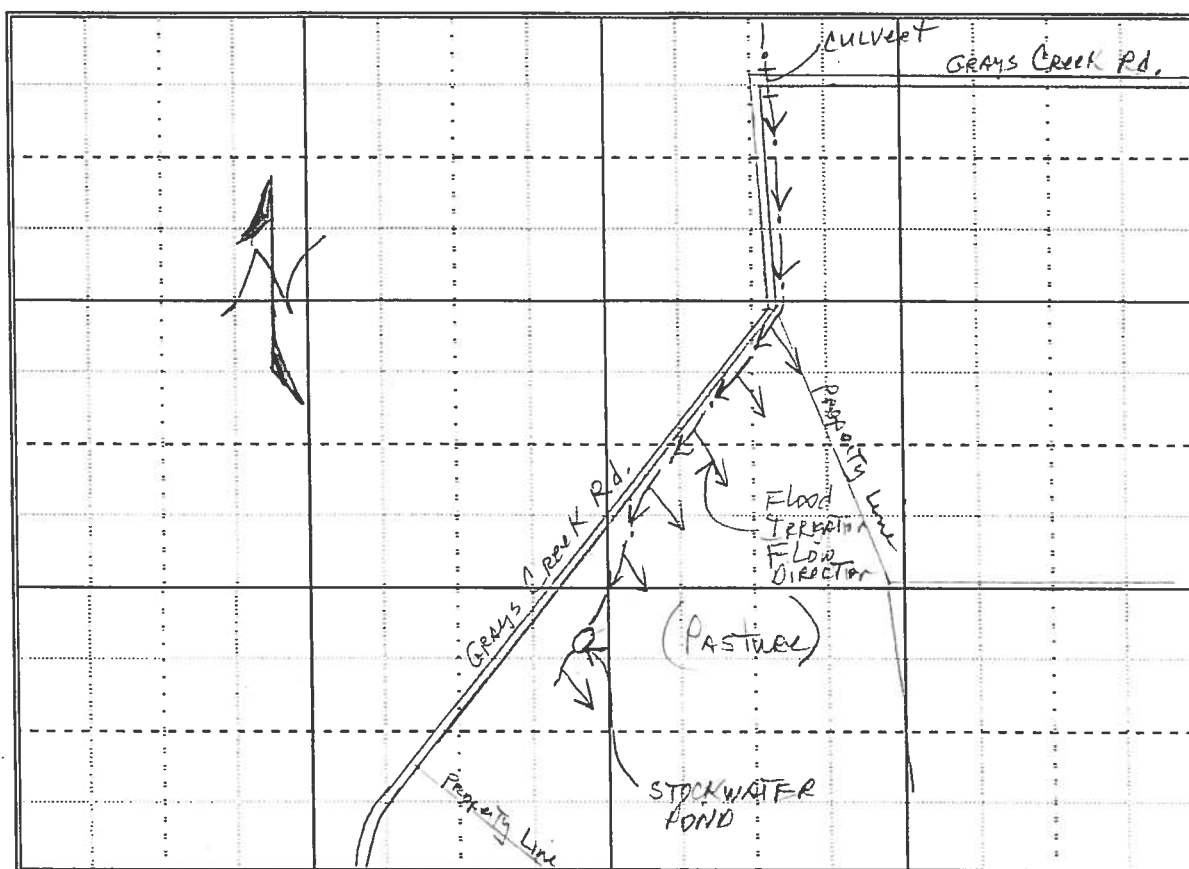
I. AUTHENTICATION

Field Examiner's Name *Rick Collingwood* Date 9-11-12

Reviewer _____ Date _____

Form 219 07/11

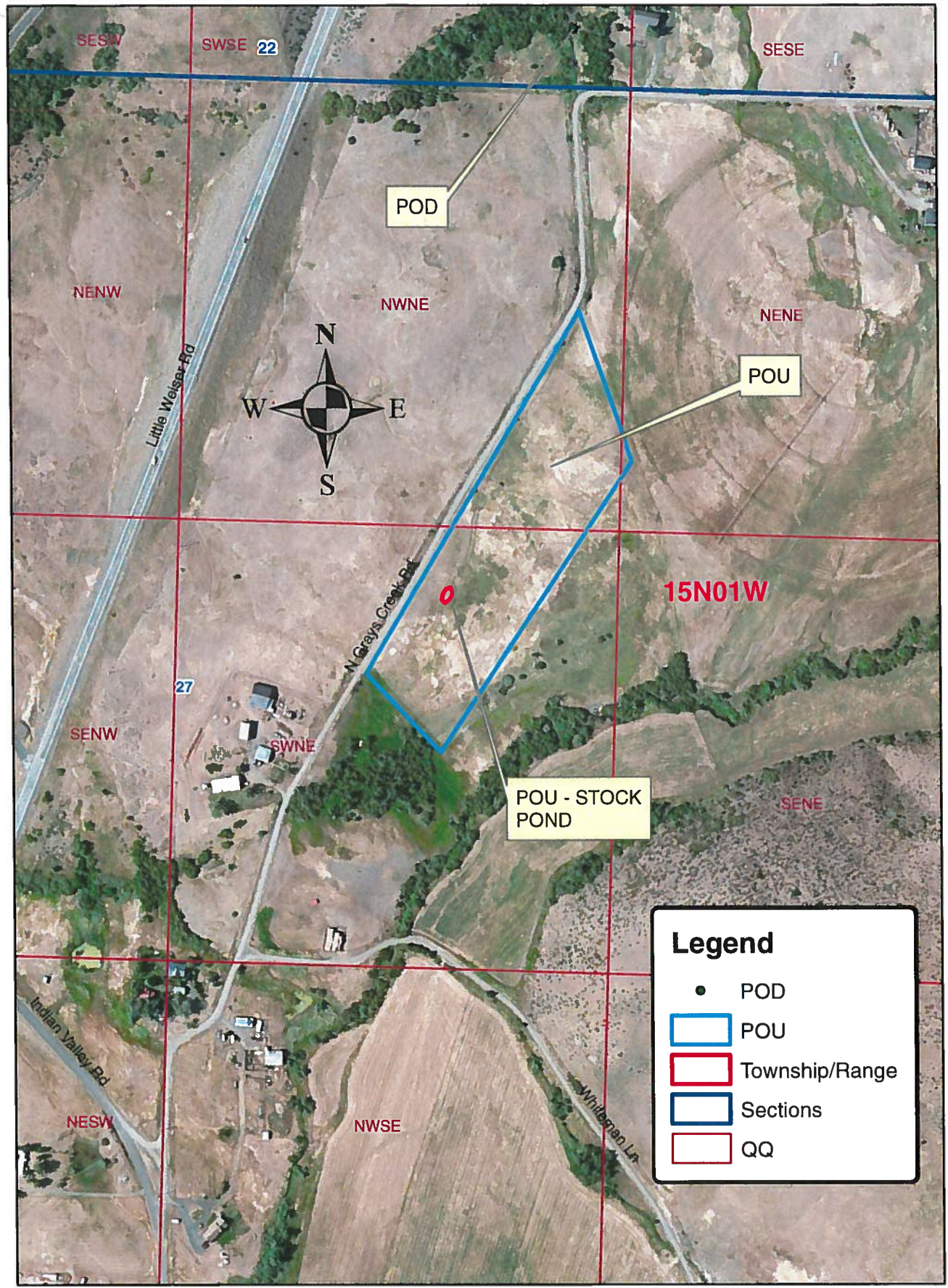
3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.



Scale: 1" = 500'

- ☐ 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

67-14380



FIELD EXAM PHOTOS

Water Right Permit: 67-14380

Field Exam Date: 6-4-12

PLS: NW1/4, NE1/4 Section 27, T.15N, R.01W.

Field Examiner: RC



Point of Diversion and Place of Use: View easterly of portable dam in irrigation ditch. Dam is used to flood irrigate the 10 acre pasture. The water in the irrigation ditch is from a spring north of the Davis property and north of N. Grays Creek Road.