

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 86-12086
Exam Date: 6/10/2018

1. Current Owner:

JOHN A GRAVELLE PO BOX 603 JULIAETTA ID 83535 AND
MATT P GRAVELLE PO BOX 603 JULIAETTA ID 83535 AND
PAUL J GRAVELLE PO BOX 603 JULIAETTA ID 83535 AND
CAROLYN M GRAVELLE PO BOX 603 JULIAETTA ID 83535

2. Accompanied by: John Gravelle

Phone No: 509-995-1940

Address: Same as above

Relationship to permit Holder: Permit Holder

3. **SOURCE:**

SPRING

Tributary

SINKS

Method of Determination: Arcmap and DRG

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
86-11916	SPRING	STOCKWATER	DECREE

Comments: WR 86-11916 is for stockwater use by the same applicant, with one of multiple PODs associated with 86-11916 (springs) being the same POD as this water right.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

SPRING NE¼ NW¼ SW¼, Sec. 26, Twp 38N, Rge 03W, B.M. LATAH County

Method of Determination: GPS. POD located at -116°41.082, 46°36.342.

PLACE OF USE: STOCKWATER

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
38N	03W	26										X							

Method of Determination: Arcmap and GPS

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
☒ X Indicate weir size/pipe as applicable.
☒ X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
☒ X Aerial Photo Attached (required for irrigation of 10+ acres).
☒ X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
N/A					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE						

2. Measurements: Unable to perform flow measurements, as pipe flowing from spring box into 24hr impoundment pond did not provide suitable area to conduct measurements, nor 5 gallon bucket test.

E. FLOW CALCULATIONS

Measured Method: A diversion rate of **0.02 cfs** is recommended for licensing. Due to the unavailability of measuring requirements, the annual volume limiting factor of 1.5 af, and the fact that the spring feeds a very small holding pond, it is reasonable to apply a 0.02 cfs diversion rate.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: NA

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

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

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

2. Volume Calculations for Other Uses:

$$\begin{aligned} \text{STOCKWATER} &= 50 \text{ head cattle} \times 12 \text{ gpd} \times 365 \text{ days} = 219,000 \text{ gal} \\ &50 \text{ horses} \times 12 \text{ gpd} \times 365 \text{ days} = 219,000 \text{ gal} \\ &50 \text{ goats/sheep} \times 2 \text{ gpd} \times 365 \text{ days} = 36,500 \text{ gal} \\ &(219,000 \text{ gal} + 219,000 \text{ gal} + 36,500 \text{ gal}) / 325,850 \text{ gal/af} = \mathbf{1.5 \text{ af}} \end{aligned}$$

G. NARRATIVE/REMARKS/COMMENTS

Admin note: WR 86-12086 was split from WR 86-11924.

Field exam on 6/10/2018 with applicant, John Gravelle, showed a spring with spring box diverting water by pipes to a nearby small pond for stockwater use. The spring at POD fed into a small holding pond that qualifies under the 24-Hour Fill allowance for Impoundment (Admin Memorandum, App Processing No. 73), which the applicant used daily to provide water source coverage for range stock. Due to inadequate piping surfaces and the pipes running to ground at pond, I was unable to perform a flow measurement. The holding pond is very small, and at time of field exam in early season the pond did not support a higher rate of inflow for daily use. It is recommended that the diversion rate of **0.02 cfs** be carried forward to licensing.

Applicant was permitted for stockwater use for 50 head of cattle, 50 horses, and 50 goats/sheep. The annual volume for these stock animals equals 1.5 af as computed below:

50 head cattle x 12 gpd x 365 days = 219,000 gal

50 horses x 12 gpd x 365 days = 219,000 gal

50 goats/sheep x 2 gpd x 365 days = 36,500 ga

(219,000 gal + 219,000 gal + 36,500 gal) / 325,850 gal/af = **1.5 af**, which will be applied to license as both the annual volume and the Maximum Diversion Volume.

Condition X02 was added to describe stockwater use and type of stock. Condition X35 was added to describe overlap requirements for Stockwater diversion rate and annual volume. Condition 01M was added to notify the applicant of potential for measuring device (if required in future). Condition 004 was added to describe restrictions of right-of-way or easement for this WR. WR 86-11916 is for stockwater use by the same applicant overlapping this water rights POU, but condition X35 listed above was applied to license mitigating overlap concerns

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
STOCKWATER	01/01 to 12/31	0.02 CFS	1.5 AF

Totals: 0.02 CFS 1.5 AF

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 ☒ None

I. AUTHENTICATION

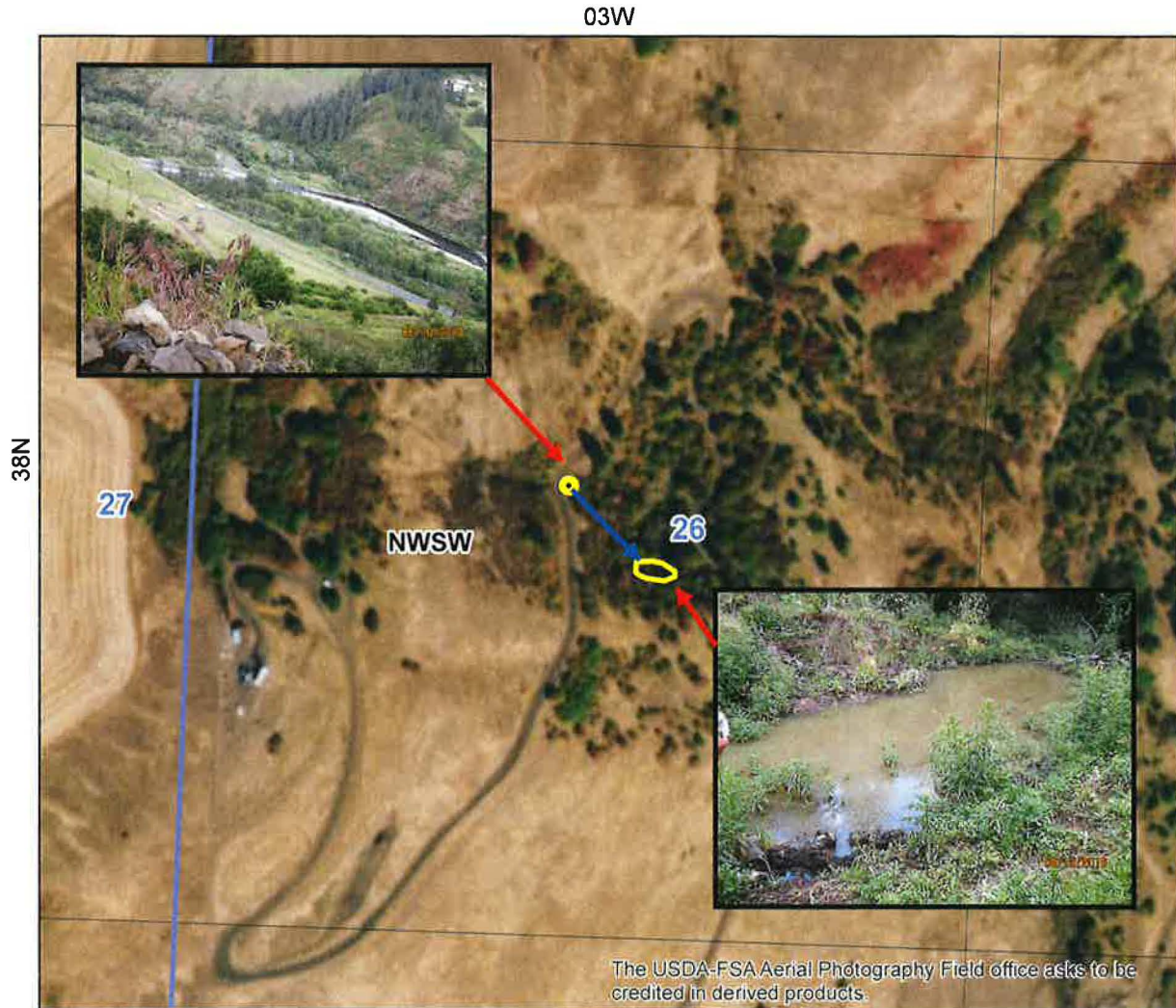
Luke Bates - Water Resource Agent






Field Examiner's Name Adam Fink Date 5/27/2020

Reviewer L. Bates Date 5-22-2020


State of Idaho
Department of Water Resources
Attachment to Field Exam
86-12086

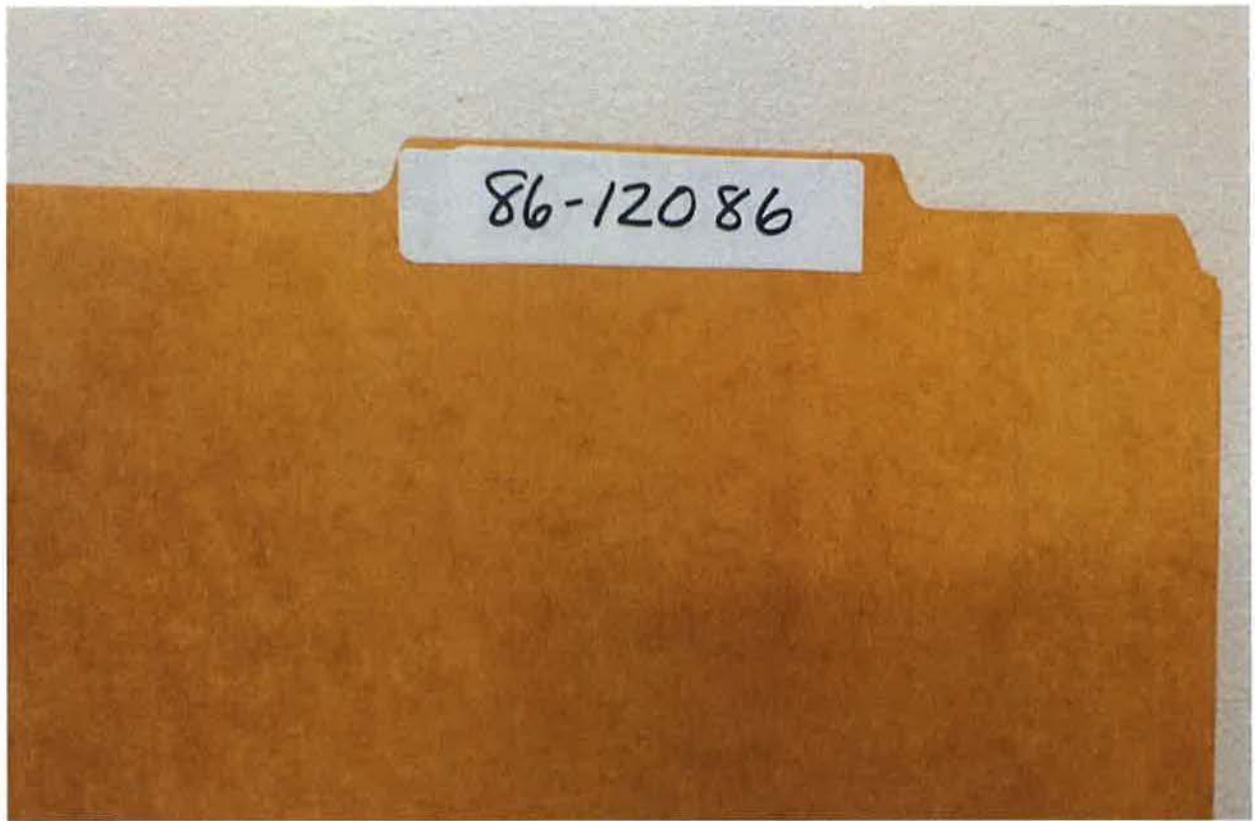
STOCKWATER system diagram.



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters

0 0.035 0.07 0.14 Miles





POD - SPRING



POND POU



STOCKWATER POU