

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 87-12282

Exam Date: 05/18/2021

1. Current Owner:
LARRY B LACY 1145 HEADRICK RD POTLATCH ID 83855-9646 AND
BETTY J LACY 1145 HEADRICK RD POTLATCH ID 83855-9646
2. Accompanied by: Larry Lacy
Phone No: 208-596-3452
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: NO Overlap
2. Other water rights with the same point-of-diversion: NO Overlap

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

SPRING SW¼ SE¼ SW¼, Sec. 29, Twp 41N, Rge 04W, B.M. LATAH County

Method of Determination: GPS located - vertical metal culvert in ground capturing spring water; located at -116°52.1895, 46°51.5704.

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	
41N	04W	29												X					

Method of Determination: Field exam and Arcmap aerial imagery.

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
SPRING					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
4 CUP						

2. Measurements: A flow measurement was captured from the stockwater trough overflow discharge pipe; a 4-cup measurement was completed with the 4-cup vessel filling in 6.69 sec. Using conversions, the flow rate is approximately 2.1 gpm, which is smaller than the Department's lowest diversion rate of 4.48 gpm or 0.01 cfs. The diversion rate of **0.01 cfs** is recommended for licensing purposes.

E. FLOW CALCULATIONS

Measured Method: 4-cup measurement was completed with the 4-cup vessel filling in 6.69 sec; 4 cups x 4 (factor) = 1 gallon and 6.69 sec x 4 (factor) = 26.76 sec per gallon equivalent to approximately 2.1 gpm. The smallest department diversion rate equals 4.4 gpm or 0.01 cfs, which is recommended for licensing purposes.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses: Stockwater annual volume equals 80 head cattle x 12 gpd x 365 days = 350,400 gal per year / 325,850 gal per af = 1.07 af = **1.1 af** considering department rounding standards.

G. NARRATIVE/REMARKS/COMMENTS

Right 87-12282 has been split from 87-10407 due to the separate spring sources not co-mingling water in the respective water system's beneficial use(s). 87-12282 accounts for stockwater use from a spring located west of the main residence.

Field exam performed on 5/18/2021 with the applicant, Larry Lacy, showed diversion from a spring for domestic beneficial uses. At the POD, Mr. Lacy installed a 36 inch culvert vertically with 8 feet buried in the ground to capture spring water. A buried pipe routed water downhill approximately 75 feet to a constructed square concrete stockwater trough. A flow measurement was taken from the trough's overflow discharge pipe; a 4-cup measurement was completed with the 4-cup vessel filling in 6.69 sec. Applying conversions, the flow rate is approximately 2.1 gpm, which is smaller than the Department's lowest diversion rate of 4.48 gpm or 0.01 cfs. The diversion rate of **0.01 cfs** is recommended for licensing purposes.

The stockwater POU consists of a single concrete square trough located in a pasture. Mr. Lacy states that cattle drink directly from the trough. Photographs were taken of the tank, and the pasture in which the trough resides shows stock usage. At time of the field exam, the cattle had not been put to pasture in is portion of the applicant's property, as they are rotated seasonally. The trough is approximately 10ft x 10ft x 3ft, and is small enough to be considered a 24-hr impoundment vessel. During the field exam field maps were used to identify the location of the POU, which is clearly identified using

Arcmap aerial imagery. The annual volume for stockwater equals 80 head cattle x 12 gpd x 365 days = 350,400 gal per year / 325,850 gal per af = 1.07 af = **1.1 af** considering department rounding standards, which is recommended as the maximum diversion volume for licensing purposes.

Conditions X01 and X02 were removed from the permit during licensing review. Condition X35 was added to describe that rights 87-12282 and 87-12283 when combined shall not exceed a total annual maximum diversion volume of 1.1 af for the stockwater use of 80 head of mixed stock. All other conditions on the permit shall be carried forward to licensing. While there is no overlap of water right POU for this right, the stockwater use for two separate spring sources provides water for the same 80 head of cattle that the applicants run on their property. Condition X35 was added to mitigate any overlap concerns between the two split rights. There are no other overlap concerns for this water right.

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	0.01 CFS	1.1 AF
<u>Totals:</u>		0.01 CFS	1.1 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  Date 6/7/2021

Reviewer  Date 6/30/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
87-12282

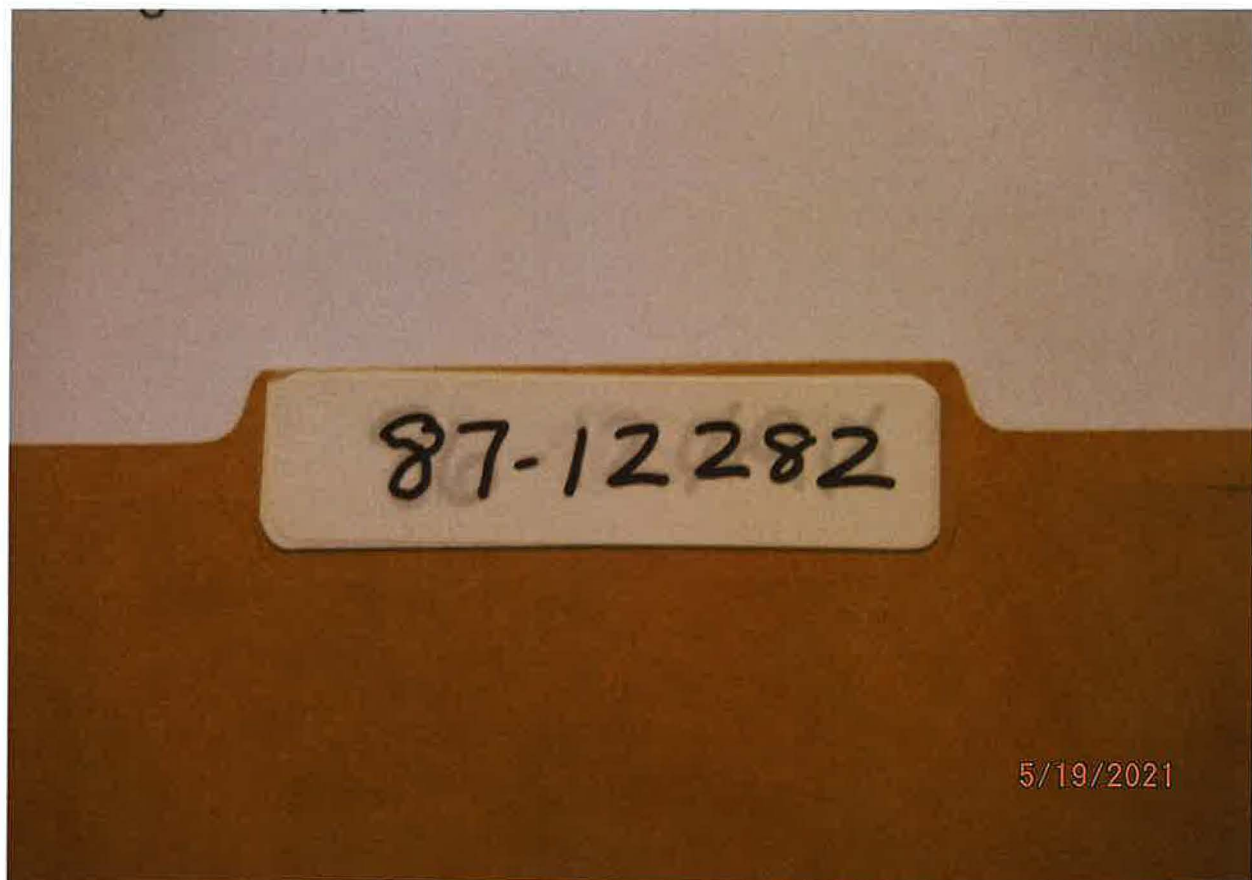
STOCKWATER system diagram.



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

0 0.025 0.05 0.1 Miles





F.E. DATE 5/18/2021 – SPLIT FROM WR# 87-10407 ON 5/19/2021



POD – SPRING WATER FILLS VERTICAL CULVERT AND IS PIPED DOWNHILL TO POU



POU – STOCKWATER





OVERFLOW PIPE FROM STOCKWATER RESERVOIR



FLOW MEASUREMENT = 4 CUPS IN 6.69 SECONDS FROM END OF OVERFLOW DISCHARGE PIPE



ONE OF MULTIPLE PASTURES USED BY APPLICANT FOR STOCK



SCRAPBOOK PHOTO ILLUSTRATING STOCK USE ON PROPERTY