

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 86-12028

Exam Date: 07/01/2020

1. Current Owner:
LEE AND NANCY DAVISON TRUST 37134 SUNNYSIDE BENCH RD LENORE ID 83541-6009
2. Accompanied by: Un-accompanied; authorization from Lee Davison to conduct without applicant on premise.
Phone No: 208-520-1462
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

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

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 SW¼ NE¼, Sec. 31, Twp 37N, Rge 01W, B.M. NEZ PERCE County

Method of Determination: GPS. POD is located at -116°29.969, 46°30.581.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
37N	01W	31			0.1														0.1

Total Acres: 0.1

Method of Determination: Field exam and Arcmap.

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 BOX	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 piping from spring box to storage tank was not accessible; flow from storage tank had back pressure preventing accurate measurement. No measurement is required.

E. FLOW CALCULATIONS

Flow measurement not required as per IDAPA RULE 37.03.02.035.01.r.iii.

F. DIVERSION RATES

The diversion rate for this irrigation right is limited to 0.01 CFS or 4.5 GPM.

G. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.1 \text{ acres} \times 3.5 \text{ afa} = 0.4 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \text{N/A, no flow measurement applied.}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 0.4 \text{ af}$$

2. Volume Calculations for Other Uses:

This right is from a surface3 water source, and does not receive an annual volume.

H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-office field exam, but a physical field exam was conducted on 7/1/2020 in order to accurately determine spring POD. GPS was used to determine the POD, irrigation was verified at time of exam, and photographs were taken to show POD and irrigation.

The permit was authorized for 0.06 cfs. At time of exam, I was unable to complete a flow measurement as piping from the spring box to storage tank was not accessible for measurement. Piping from storage tank had back-pressure that would cause an inaccurate flow measurement. It was determined that the flow measurement not required as per IDAPA RULE 37.03.02.035.01.r.iii, and the license is recommended for **0.1 cfs or 4.5 gpm**.

Applicant diverted water using a spring box to a 650 gallon storage tank, which routed water using a 2 inch PVC pipe to small fenced irrigation area for trees and small plants. The flow from the spring was constant, but very low and applicant used the storage tank to allow accumulate water, providing cycled irrigation of his small field. Overflow from the storage tank returned directly to the natural spring channel.

The place of use was challenging to confirm via aerial photography, but field exam showed a clearly fenced in field the applicant had applied irrigation water to. The area was traced out on a map during exam, and during licensing review Arcmap was used to trace out irrigated area equal to 0.1 acres. The surface water source does not receive an annual volume, but license is limited to 3.5 AF per acre.

Condition 26 was removed from license. All other conditions remain on license. There are no overlap concerns for this water right.

Have conditions of permit approval been met? X Yes No

I. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>
IRRIGATION	03/15 to 11/15	0.01 CFS

Totals: 0.01 CFS

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 X None

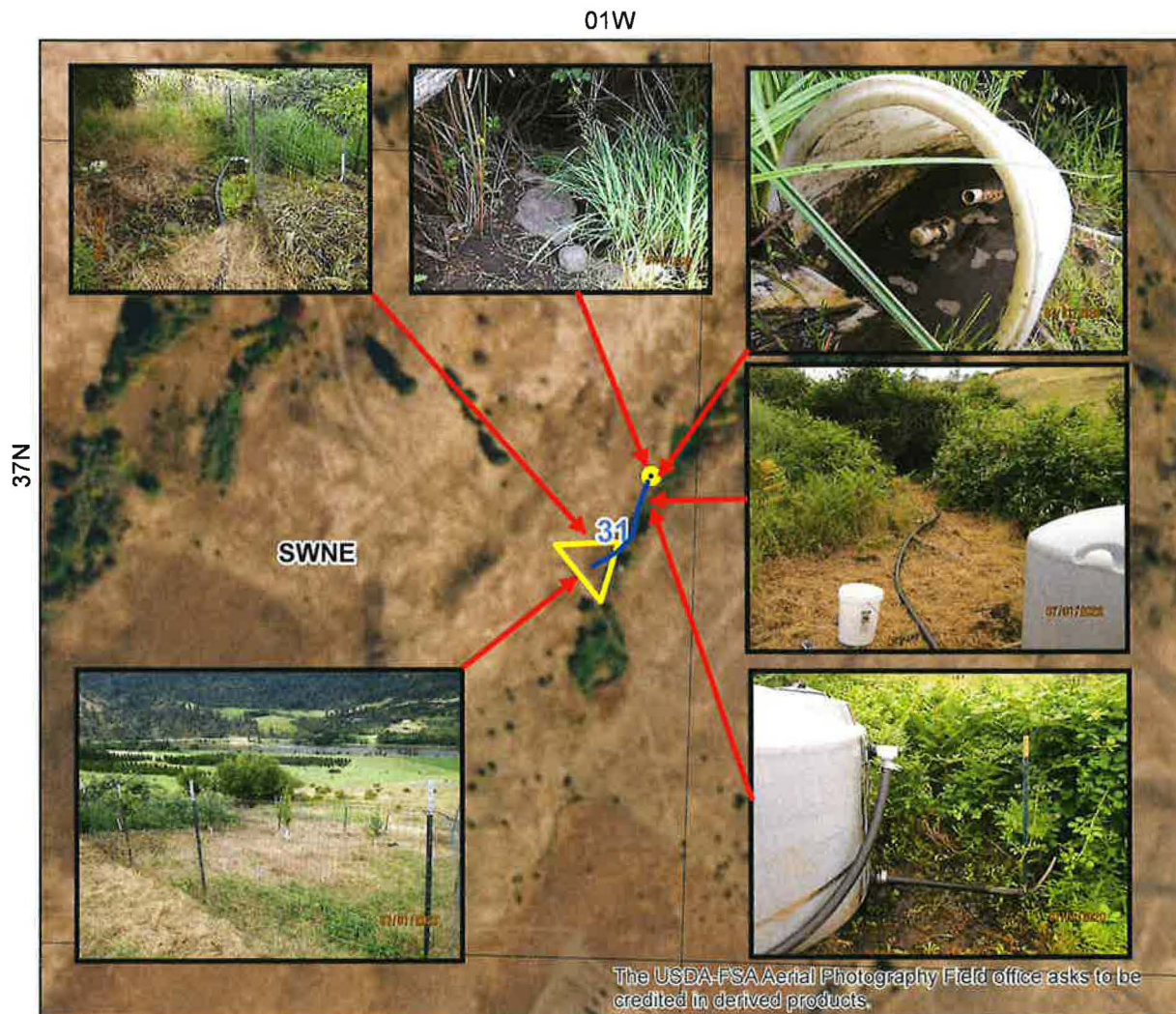
J. AUTHENTICATION Luke Bates - Water Resource Agent

Field Examiner's Name 82 Date 7/6/2020

Reviewer Adam Fink Date 7/7/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
86-12028

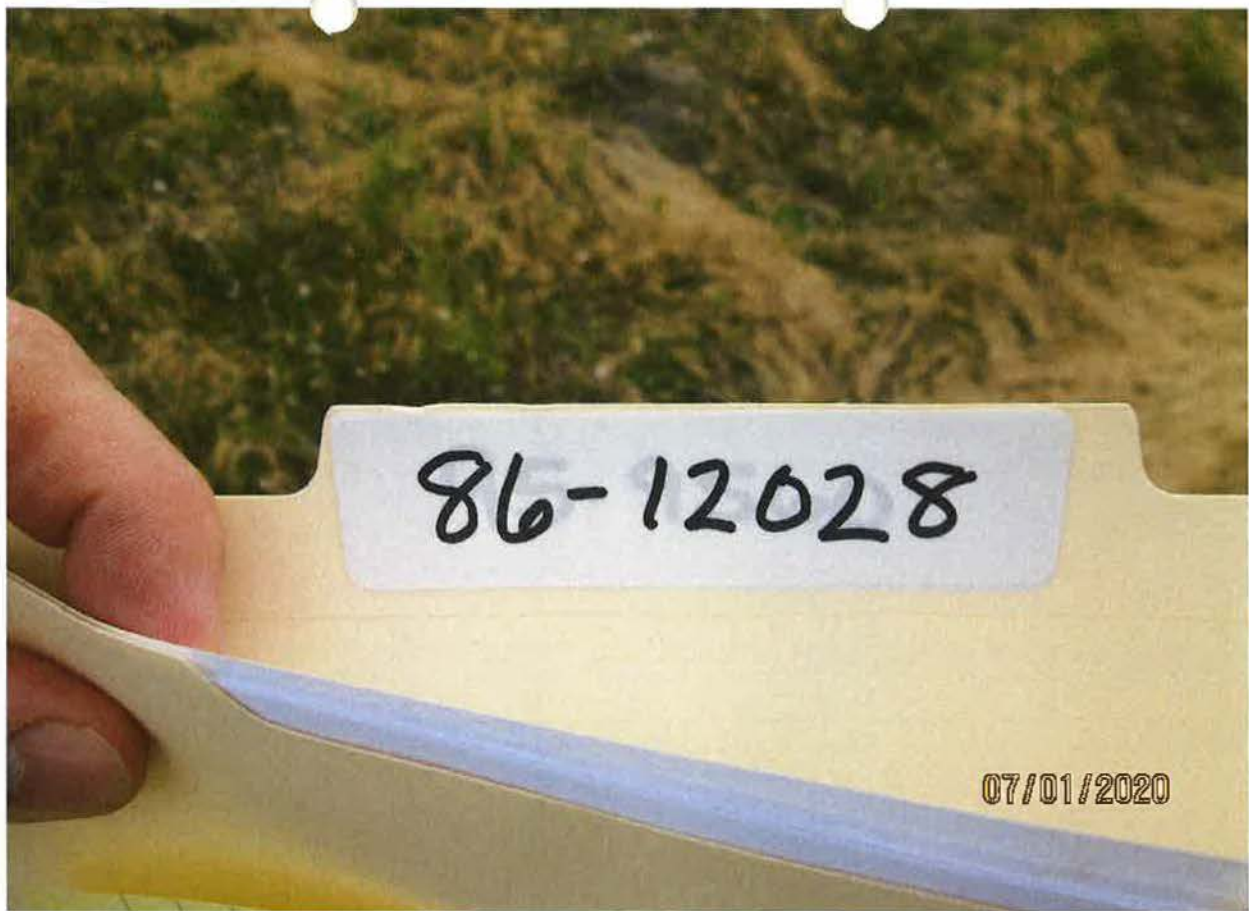
IRRIGATION system diagram.



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

0 0.035 0.07 0.14 Miles





SPRING



POD – SPRING BOX





WATER CONVEYANCE TO STORAGE TANK





STORAGE TANK INFLOW AND OUTFLOW



PVC PIPING TO IRRIGATION POU



IRRIGATION POU

