

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-7576
Exam Date: 09/20/2021

1. Current Owner:
LARRY C RUNKLE PO BOX 235 COEUR D ALENE ID 83816-0235 AND/OR
LINDA RUNKLE PO BOX 235 COEUR D ALENE ID 83816
2. Accompanied by: Larry Runkle
Phone No: 208-660-4259
Address: Same as above
Relationship to permit Holder: Permit holder

3. **SOURCE:** NORTH FORK COEUR D ALENE RIVER
Tributary COEUR D ALENE RIVER

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 SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
NORTH FORK COEUR D ALENE RIVER NW¼ NE¼, Sec. 31, Twp 50N, Rge 04E, B.M. SHOSHONE County

Method of Determination: GPS. POD is located at -115°59.637, 47°38.657.

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	
50N	04E	30															0.1		0.1
50N	04E	31		1.7 L3															1.7

Total Acres: 1.8

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
WATER TRANSFER PUMP		1	97101001	RED LION	¾ INCH POLY PIPE

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5-GAL BUCKET MEASUREMENT						

2. Measurements: Three 5-gallon bucket tests were completed from a hose connected to the transfer pump, with average of three resulting in a diversion rate of 5 gal / 14.59 sec x 60 sec/min = 20.56 gpm = **0.05 cfs**, considering department rounding standards.

E. FLOW CALCULATIONS

Measured Method: 5-GAL Bucket Test = (5 gal / 14.94 sec) x 60 sec/min = 20.08 gpm
 = (5 gal / 14.31 sec) x 60 sec/min = 20.96 gpm
 = (5 gal / 14.52 sec) x 60 sec/min = 20.66 gpm

Average of 3ea 5-GAL Bucket Tests = (20.08 gpm + 20.96 gpm + 20.66 gpm) / 3 = 20.57 gpm = 0.05 cfs considering department rounding standards.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.8 \text{ ac} \times 3.0 \text{ afa} = 5.4 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05 \text{ cfs} \times 214\text{-days} \times 1.9835 = 21.2 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 5.4 \text{ af}$$

2. Volume Calculations for Other Uses:

This right uses a surface water source and does not receive an annual volume nor maximum diversion volume.

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 9/20/2021 with the applicant, Larry Runkle, showed water being diverted from the North Fork Coeur D'Alene River for irrigation purposes. At the POD, the applicant's diverting works include a 1 HP Red Lion water transfer pump with screened intake pipe placed along the shore of his property. Three 5-gallon bucket tests were completed from a hose connected to the transfer pump, with average of three resulting in a diversion rate of 5 gal / 14.59 sec x 60 sec/min = 20.56 gpm = **0.05 cfs**, considering department rounding standards which is recommended as the maximum diversion rate for licensing purposes. A ¾ inch poly pipe connects to the discharge port and routes to several irrigation riser pipes, and a hose bib connection located on the applicant's property.

During the exam, the irrigation POU was walked with Mr. Runkle and active irrigation was occurring to demonstrate the water system in use. The irrigated acreage was traced out using Arcmap aerial imagery during licensing review and equals 1.8 acres. The annual volume associated with irrigation equals $1.8 \text{ ac} \times 3.0 \text{ afa} = 5.4 \text{ af}$, but as this is a surface source water right no volume metrics are included for licensing purposes. Four main irrigation risers to sprinklers that include hose bib connections are situated along the bank of the applicant's riverfront parcel. At the end of the run a continuation poly pipe routes inland and terminates at a hose bib where the applicant uses hose & sprinklers to water a portion of the property closer to the roadway. Irrigation includes lawn space as well as trees and shrubs. The applicant was permit approved to develop up to 2.1 acres, but during the field exam only 1.8 acres was found to be developed and are recommended for licensing.

During licensing review department staff identified errors in data entry for the POD & POU township PLS designation legal description. Review of the water right backfile shows the applicant applied designating 50N for both the POD & POU legal description in step(s) 3 & 9 respectively. Following intake of the application department staff errored entering the township as 51N for the POD & POU. The application ran for advertising and was subsequently permit approved with 51N as the township designation. An Application for Amendment (For Licensing Purposes) was developed to revise the Township legal designation to read 50N as applicant had originally applied for. No amendment fee is recommended to correct the POD & POU legal description(s) due to the department incorrectly inputting during application processing. Mr. Runkle signed the Application for Amendment in the office on 11/10/2021.

Condition 26A was removed from the permit during licensing review. All other conditions on the permit shall be carried to the license. There are no 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>
IRRIGATION	04/01 to 10/31	0.05 CFS

Totals: 0.05 CFS

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

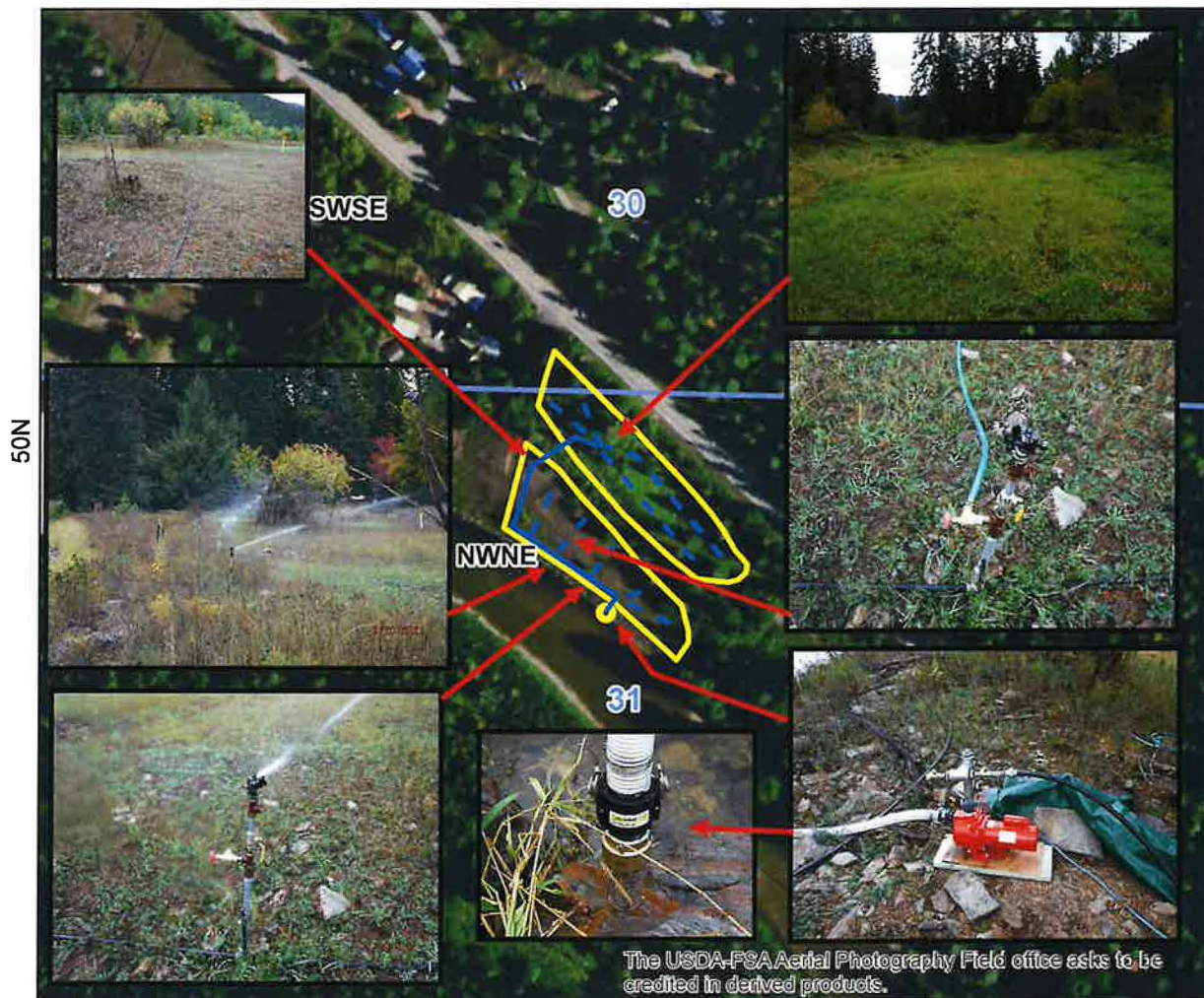
Luke Bates - Water Resource Agent

Field Examiner's Name *John D. Bates* Date 11/10/2021
 Reviewer *Adi Fink* Date 11/16/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
94-7576

IRRIGATION system diagram.

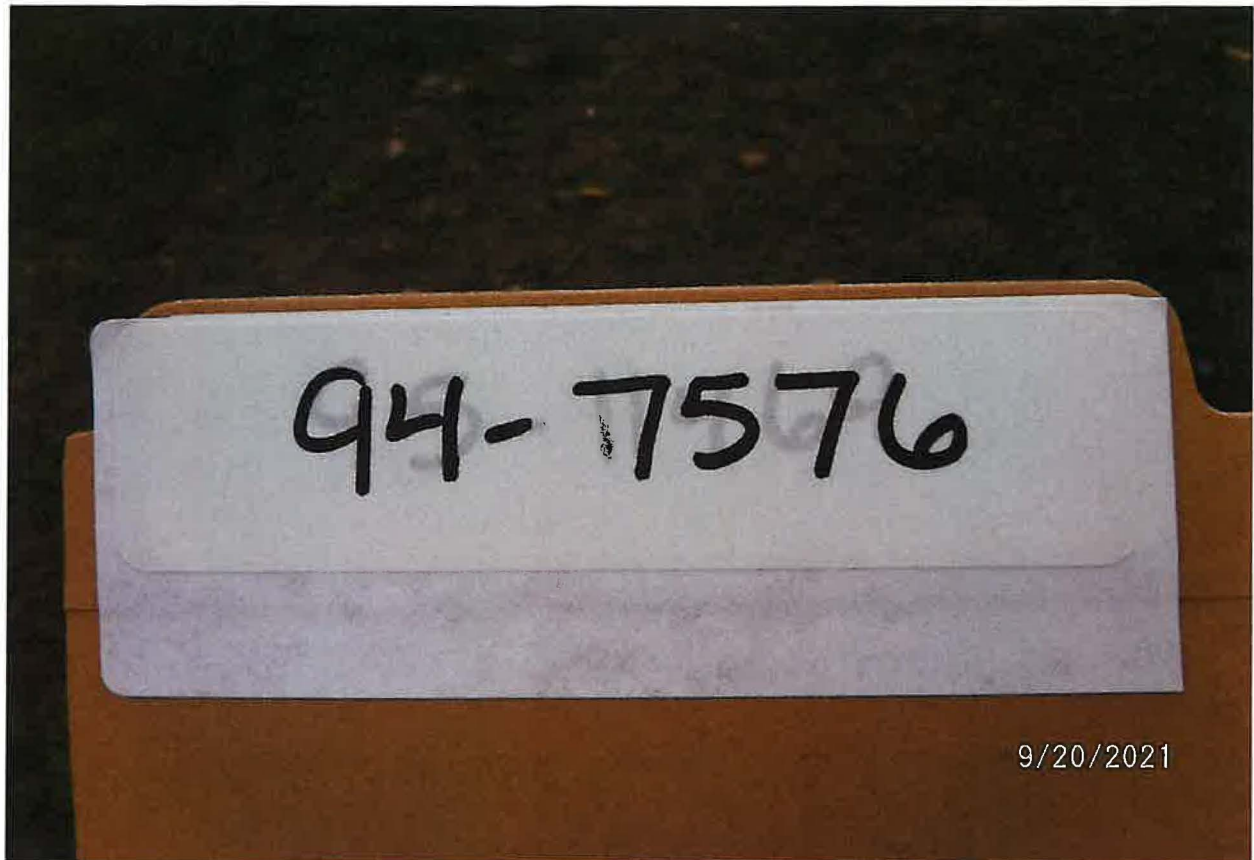
04E



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

0 0.035 0.07 0.14 Miles





FIELD EXAM DATE 9/20/2021



POD – SCREENED INTAKE PIPE TO PUMP FROM RIVER



DIVERTING WORKS – 1 HP PUMP TO ¾ INCH MAIN IRRIGATION POLY PIPE





IRRIGATION POU



4EA ½ SPRINKLER RISER PIPES WITH HOSE BIB AND SPRINKLER ATTACHMENTS ALONG RIVER



END OF $\frac{3}{4}$ INCH POLY PIPE RUN – TO – $\frac{1}{2}$ INCH RISER PIPE AND HOSE BIB ATTACHMENT



IRRIGATION POU – BY HOSE AND SPRINKLER



IRRIGATION POU





IRRIGATION POU

