

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9734

Exam Date: 08/27/2020

1. Current Owner:
STEVEN J WRIGHT PO BOX 3011 HAYDEN ID 83835-3011 AND/OR
CINDY L WRIGHT PO BOX 3011 HAYDEN ID 83835-3011
2. Accompanied by: Cindy L Wright
Phone No: 208-929-0113
Address: Same as above
Relationship to permit Holder: Permit Holder

3. **SOURCE:**
PEND OREILLE RIVER

Tributary
COLUMBIA RIVER

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
96-7816	PEND OREILLE RIVER	DOMESTIC	LICENSE

Comments: right 96-7816 is a large tract domestic license that overlaps this rights POU, but applicant's home is not associated with right 96-7816, and the right does not pose a concern for overlap.

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:

PEND OREILLE RIVER L1 (SE¼ SE¼), Sec. 26, Twp 57N, Rge 03W, B.M. BONNER County

Method of Determination: GPS; POD is a submersible pump in creek located at -116°39.347, 48°15.179.

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	
57N	03W	26																0.2 L1	0.2

Total Acres: 0.2

Method of Determination: field exam and Arcmap.

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
☒ X 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
☒ X 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
NONE					

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 bib off main irrigation pipeline, with average of three resulting in diversion flow rate of 5 gal / 46.62 sec x 60 sec/min = 6.4 gpm = **0.01 cfs**, considering Department rounding standards.

E. FLOW CALCULATIONS

Measured Method: 5 GAL Bucket Test = (5 gal / 46.63 sec) x 60 sec/min = 6.43 gpm
 = (5 gal / 46.50 sec) x 60 sec/min = 6.45 gpm
 = (5 gal / 46.72 sec) x 60 sec/min = 6.42 gpm
 Average of 3ea 5 GAL Bucket Tests = (6.43 gpm + 6.45 gpm + 6.42 gpm) / 3 = 6.4 gpm = 0.01 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.2 \text{ ac} \times 3 \text{ afa} = 0.6 \text{ af}$
 $V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.01 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 4.2 \text{ af}$
 $V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 0.6 \text{ af}$

2. Volume Calculations for Other Uses:

Irrigation use is from a surface water source, as such there are no volumes applied to license.

G. NARRATIVE/REMARKS/COMMENTS

Field exam conducted on 7/27/2020 with applicant, Cindy Wright, showed water being diverted from Pend Oreille River using a submersible pump for irrigation purposes. Three 5 gallon bucket flow measurements were taken to determine the diversion rate, with average of three measurements $5 \text{ gal} / 46.62 \text{ sec} \times 60 \text{ sec/min} = 6.4 \text{ gpm} = 0.01 \text{ cfs}$, considering Department rounding standards, which will be applied as the maximum diversion rate on license.

Applicant permitted for 0.3 acres of irrigation; at time of field exam, the irrigated acreage was sketched out. During licensing review, Arcmap aerial imagery was used along with field notes to trace out irrigated acreage equaling 0.2 acres. As the home was constructed in 2019, prior year aerial imagery does not adequately portray the irrigated lawn around applicant's home. Year 2019 aerial imagery from Google Earth with capture date 8/4/2019 shows pre home construction; year 2019 Arcmap aerial imagery shows the new home constructed, but due to a single pitch low angle metal roof, the image is washed out with much of the field exam observed irrigation washed out from reflection in the image. Field notes and photographs were used to more accurately trace out the acreage. Applicant routed 1 1/4 inch PVC pipe from the water transfer pump routed along the property boundary fence, with a hose bib installed every 15 feet providing hose to sprinkler irrigate operation. Multiple hose and sprinklers were observed on the lot around the home at time of field exam. Annual volume equals $0.2 \text{ ac} \times 3.0 \text{ afa} = 0.6 \text{ af}$, but as this is a surface water source right, no volumes are applied to license.

All conditions from permit remain on license. Water Right 96-7816 is a large tract domestic license that overlaps this rights POU, but applicant's home and irrigation is not associated with right 96-7816, and the right does not pose a concern for overlap. There are no other concerns for overlap 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	0.01 CFS

Totals: 0.01 CFS

2. Recommended Amendments

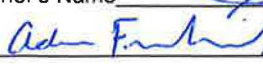
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

I. AUTHENTICATION

Luke Bates - Water Resource Agent

Field Examiner's Name  Date 8/28/2020

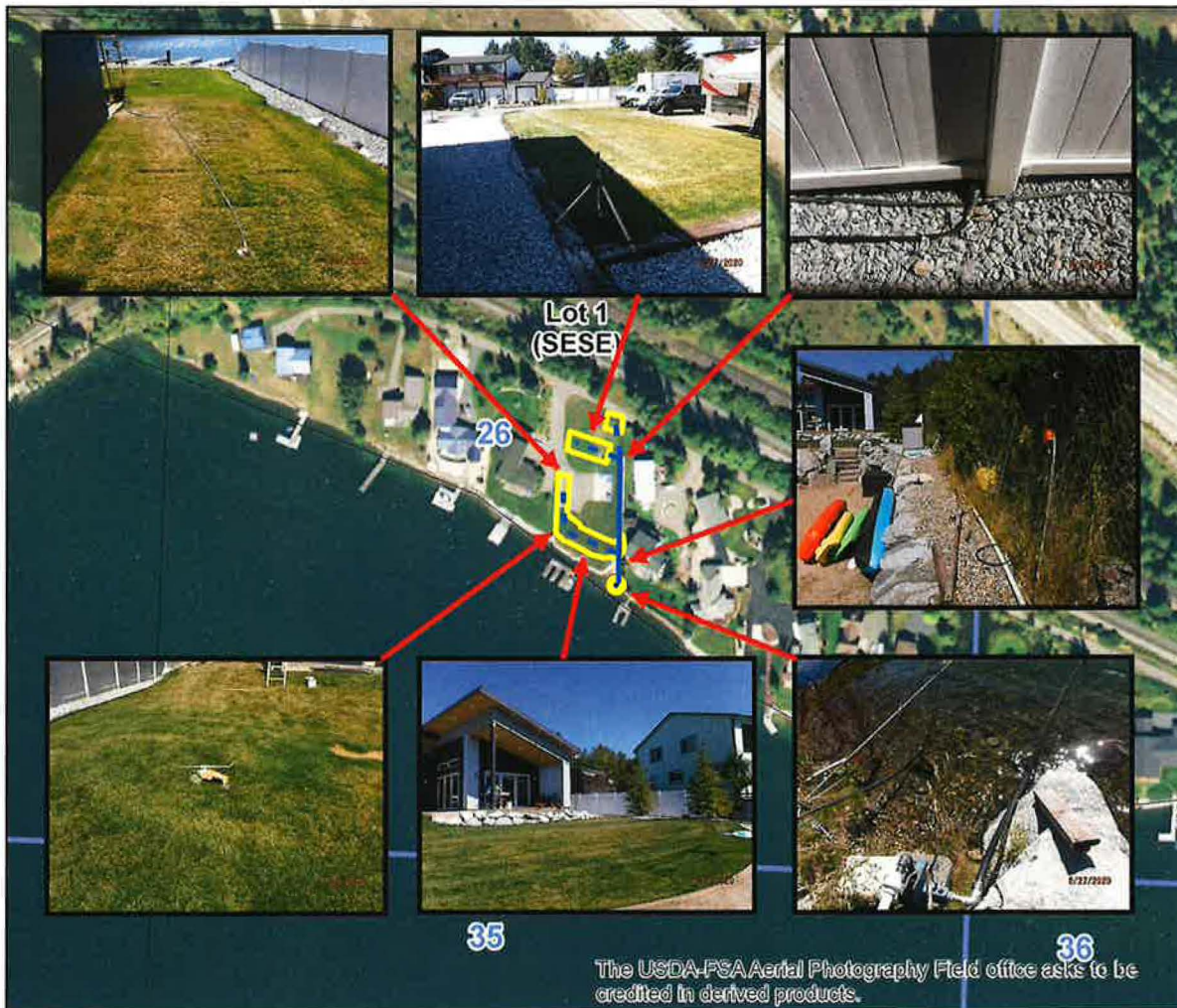
Reviewer  Date 8/31/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9734

IRRIGATION system diagram.

03W

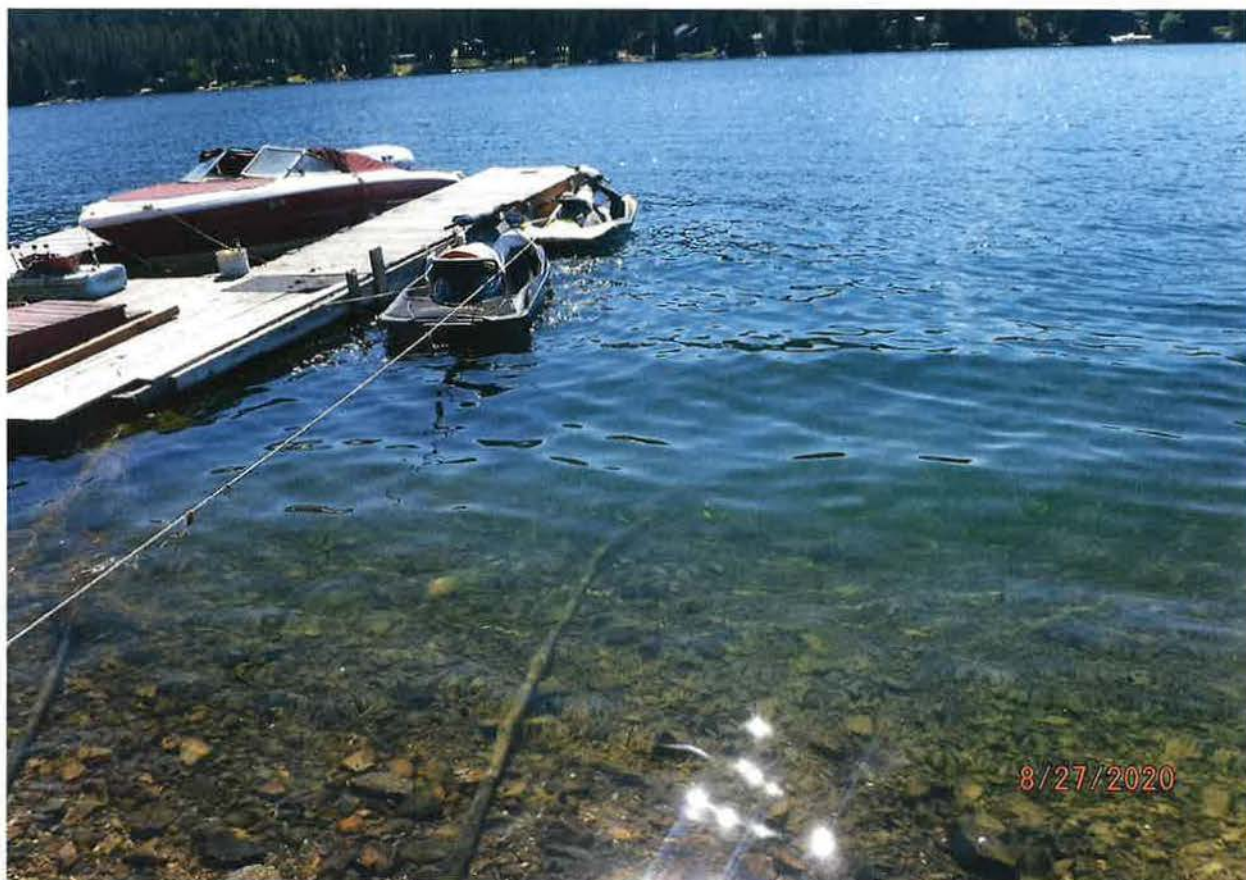
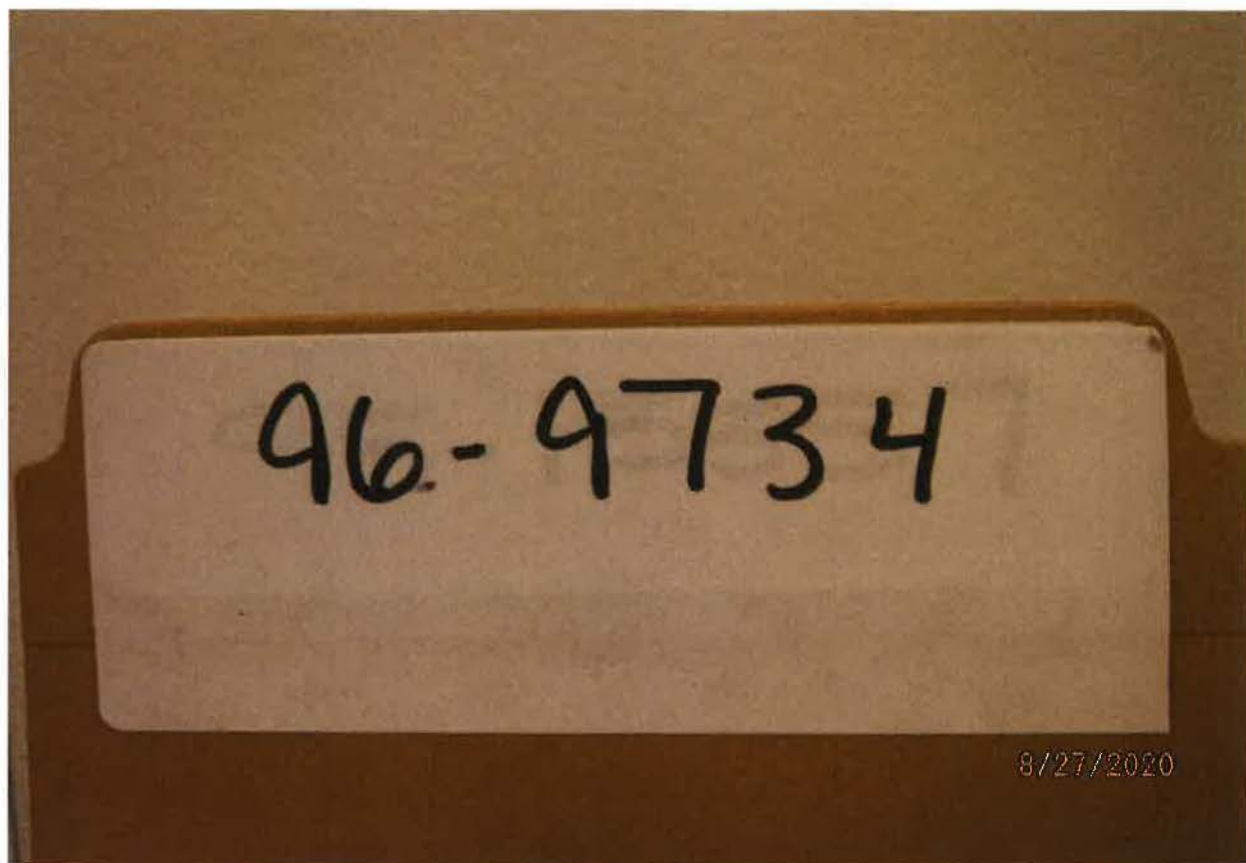
57N



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

0 0.035 0.07 0.14 Miles





POD - PIPE IN PEND OREILLE RIVER



POD – ELECTRIC WATER PUMP



IRRIGATION SYSTEM – 1 ¼ INCH PVC PIPE ROUTED ALONG FENCE



IN-LINE HOSE BIBS PLACED EVERY 15 FEET TO SERVICE IRRIGATION BY HOSE AND SPRINKLER



END OF IRRIGATION MAIN LINE AT POU



IRRIGATION POU





IRRIGATION POU

