

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-11064
Exam Date: 09/26/2023

1. Current Owner:
ROBERT RUST 10851 W PINE ST SANDPOINT ID 83864-7347 AND/OR
MARIAN RUST 10851 W PINE ST SANDPOINT ID 83864-7347
2. Accompanied by: Robert Rust
Phone No: (208) 290-3567
Address: Same as Above
Relationship to permit Holder: Applicant

3. **SOURCE:**
PEND OREILLE RIVER

Tributary
COLUMBIA RIVER

Method of Determination: ArcMap & 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:**

PEND OREILLE RIVER L2 (NE $\frac{1}{4}$ NW $\frac{1}{4}$), Sec. 36, Twp 57N, Rge 03W, B.M. BONNER County

Method of Determination: **GPS; POD is a screened intake foot valve to a pump located at -116°38.8323, 48°45.0598**

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	36					0.4 L2												0.4

Total Acres: 0.4

Method of Determination: **ArcMap & DRG**

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
Centrifugal Pump	STA-RIGHT	3/4	A79	C4812EC11	

D. FLOW MEASUREMENTS

1.

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

2. Measurements: This exam qualifies for an in-office exam and no measurement is required for an in-house exam.

E. FLOW CALCULATIONS

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

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.4 \text{ acres} \times 3 \text{ af} = \mathbf{1.2 \text{ af}}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 214 \text{ days} \times 1.9835 = \mathbf{12.7 \text{ af}}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = \mathbf{1.2 \text{ af}}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-office field examination. A field exam was conducted on 9/26/2023 with the applicant, Robert Rust. To obtain current photographs of the POU to verify irrigation areas. Aerial imagery was used to prove there is a green space from irrigation occurring on the property and, coupled with photographs, this enabled me to accurately trace out the active irrigation acreage resulting in sufficient information to license this permit.

Permit was authorized for 0.05 cfs, or 22 gpm, diversion rate for irrigation of 1.5 acres, which is not what is being recommended for licensing purposes. During the drive-by exam, the applicant's line from the lake and the pump in the doghouse was observed. The pump was winterized at the time of exam and the irrigation system was not active for that reason. The pump specification identifies a maximum discharge of 21.4 gpm or 0.04 cfs. It is reasonable to assume once the diverted water from a foot valve is restricted to a 1 ½ inch poly pipe routed to a ¾ HP pump which goes to two water spickets and then to hose bibs for the irrigation system, the diversion rate would be reduced.. This is why I am recommending 0.03 cfs for the diversion rate.

The irrigation POU was traced out using ArcMap aerial imagery equaling 0.4 acres in size. The annual volume associated with irrigating 0.4 acres is 0.03 cfs per acre which will equate to 1.2 af. This is a surface water source so there are no volume metrics applied to the license. I have removed Condition 029, as the Statement of Completion states that they have a screened intake at the source. Condition R66 was replaced with X31 to better quantify the diversion rate and volume associated with licensing this permit.. There are no overlap concerns for this water right.

Have conditions of permit approval been met? X 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>
IRRIGATION	04/01 to 10/31	0.03 CFS	1.2 af

Totals: 0.03 CFS 1.2 AF

2. Recommended Amendments

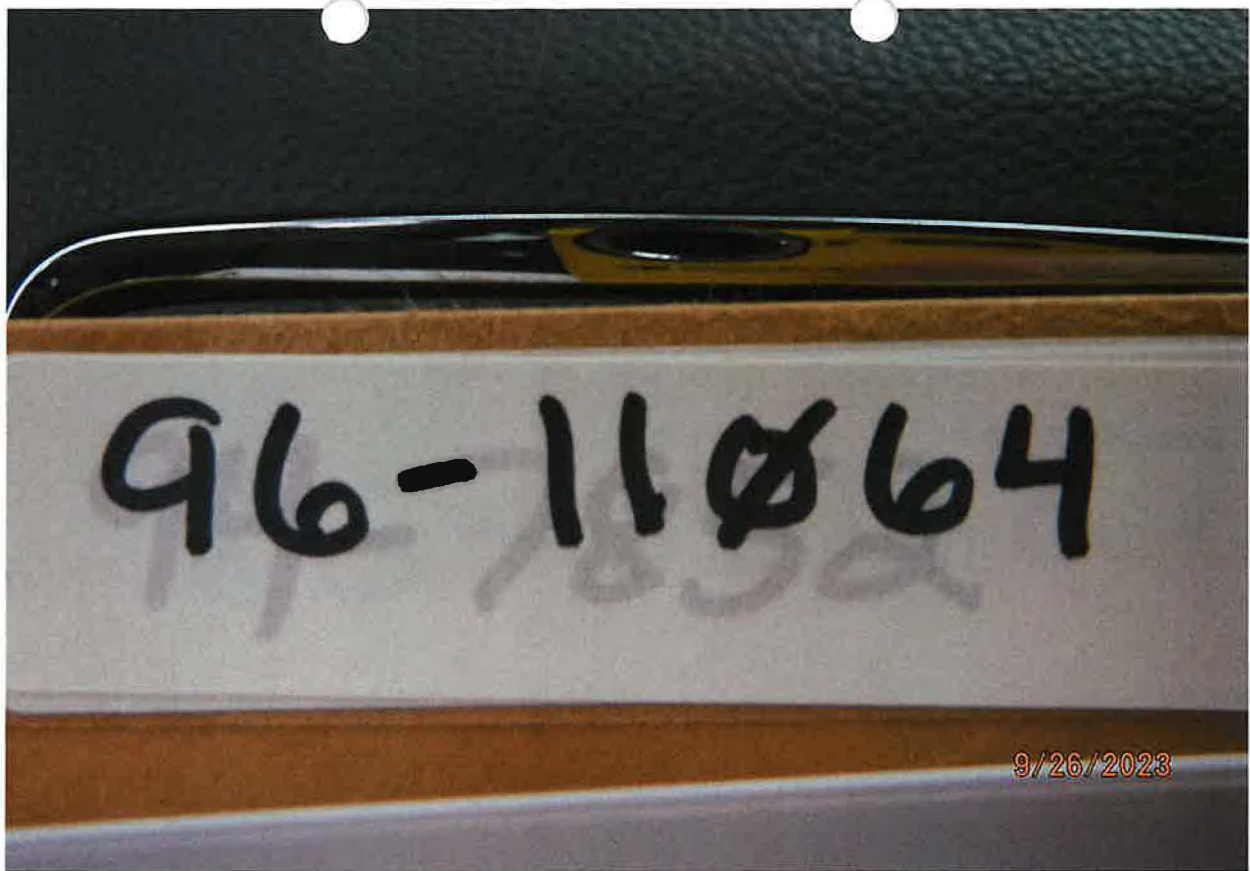
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

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

I. AUTHENTICATION Tammy Alleman – Water Resource Agent

Field Examiner's Name Tammy Alle Date 1/3/2024

Reviewer Chris Bell Date 6/7/2024



BENEFICIAL USE FIELD EXAM DATE 9/26/2023



POD – INTAKE PIPE WITH SCREENED FOOT VALVE IN RIVER



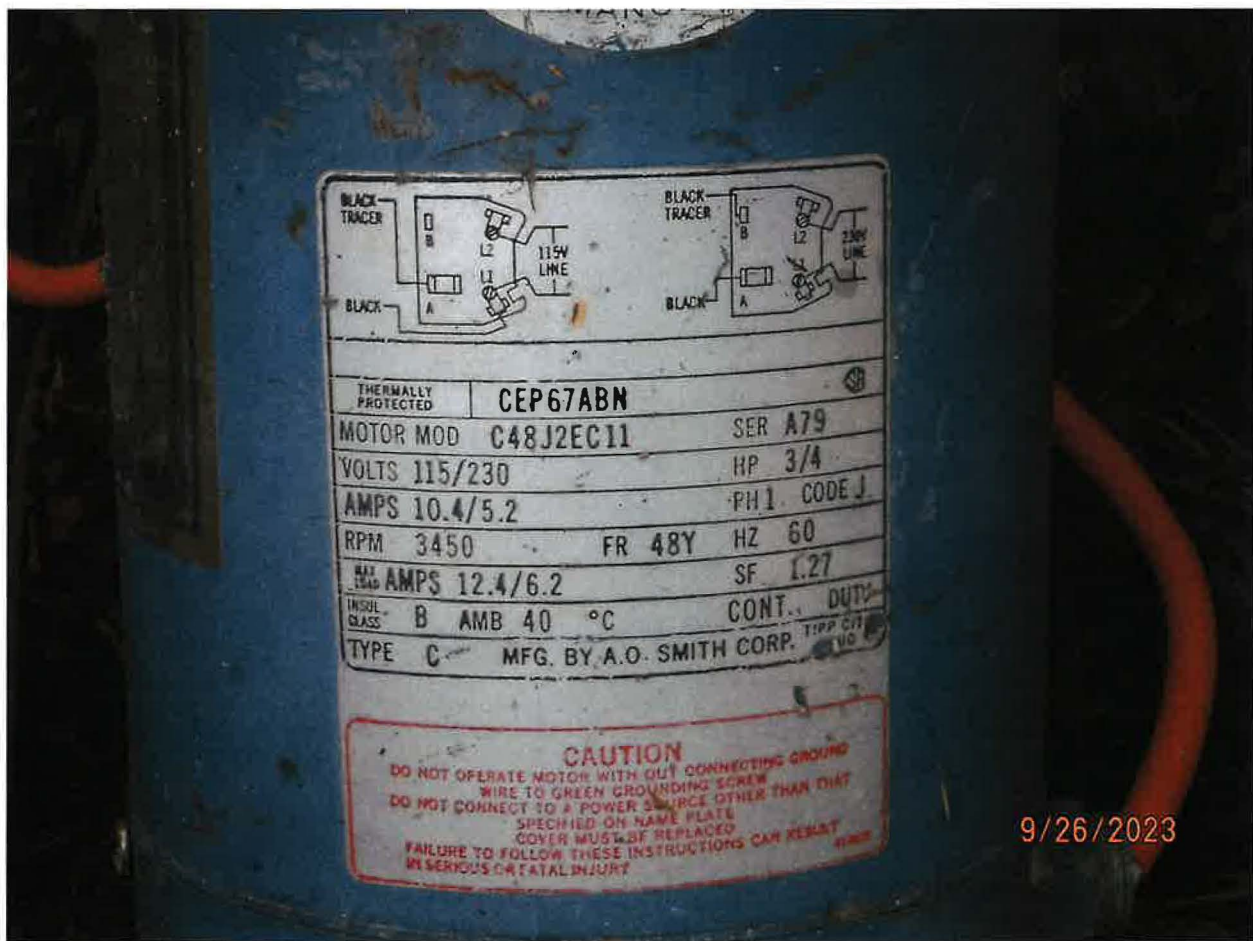
BURIED POLY LINE TO SMALL DOGHOUSE CONTAINING WATER TRANSFER PUMP



DIVERTING WORKS INCLUDE $\frac{3}{4}$ HP WATER TRANSFER PUMP TO TWO SEPARATE HOSE BIBS



STA-RITE 3/4 HP PUMP MOTOR P/N C48J2EC11





FROM PUMP BURIED POLY LINE ROUTES TO 2EA IRRIGATION HOSE BIB RISERS





IRRIGATION POU





IRRIGATION POU

