

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-11093
Exam Date: 09/13/2022

1. Current Owner:
WILLIAMS TRUST C/O JOHN K AND SUSANNA G WILLIAMS
10010 COLBURN CULVER RD SANDPOINT ID 83864-4702

2. Accompanied by: John Williams
Phone No: 805-886-0376
Address: Same as above
Relationship to permit Holder: Permit holder

3. **SOURCE:**
GROUND WATER

Method of Determination: ArcMap & DRG.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
96-11082	GROUNDWATER	DOMESTIC, STOCKWATER	BENEFICIAL USE CLAIM
96-8953 & 96-7011	LAKE PEND OREILLE	MUNICIPAL	LICENSE

Comments: Applicant has filed beneficial use claim 96-11082 in the ongoing CFPRBA adjudication process; this claim designates domestic use for 1 home (1/2-acre irrigation included) and stockwater with a POU that overlaps this rights irrigation POU. If recommended as claimed the 1/2 acre irrigation associated with domestic use shall be part of the irrigation acreage recommended for licensing Permit 96-11093. I have recommended inclusion of condition 928 for licensing this permit to mitigate any overlap concerns related to the 1/2 acre potential overlap between 96-11082 & 96-11093.

Licensed WRs 96-8953 & 96-7011 are owned by Oden Water Assn, which uses a Pend Oreille Lake water source as a municipal provider with service area that the applicant's property lies within. The applicant is not served water by Oden Water Assn and there is no concern for overlap between these water rights.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
96-11082	GROUNDWATER	DOMESTIC, STOCKWATER	BENEFICIAL USE CLAIM.

Comments: Beneficial Use Claim 96-11082 and this Right share the same groundwater well POD owned by the applicant. I did not recommend inclusion F06 for licensing purposes, as the claim has not been recommended at the time of licensing review. There is no conflict between the two WRs and the use(s) on the applicant's property.

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

GROUND WATER NE¼ SE¼, Sec. 34, Twp 58N, Rge 01W, B.M. BONNER County

Method of Determination: GPS. POD is located at -116°26.4828, 48°20.0192 (+/- 10 ft)

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	
58N	01W	34													1.7				1.7

Total Acres: 1.7

Method of Determination: beneficial use field examination 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
96-96-N-67	Franklin Electric	1	Unknown	Unknown	Unknown

D. FLOW MEASUREMENTS

1.

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

2. Measurements: Three 5-gallon bucket tests were completed from a frost-free hydrant co-located with the well, with average of three resulting in a diversion rate of 28.04 gpm = 0.06 cfs, considering department rounding standards.

E. FLOW CALCULATIONS

Measured Method: 5-GAL Bucket Test = (5 gal / 10.66 sec) x 60 sec/min = 28.14 gpm
 = (5 gal / 10.83 sec) x 60 sec/min = 27.70 gpm
 = (5 gal / 10.61 sec) x 60 sec/min = 28.28 gpm

Average of 3ea 5-GAL Bucket Tests = (28.14 gpm + 27.70 gpm + 28.28 gpm) / 3 = 28.04 gpm = 0.06 cfs considering department rounding standards.

Diversion rate recommended for licensing = 0.03 cfs x 1.7 acres observed irrigation = **0.05 cfs**.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.7 \text{ acres} \times 3.0 \text{ afa} = 5.1 \text{ af}$$

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

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = \mathbf{5.1 \text{ af}}$$

2. Volume Calculations for Other Uses: None.

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 9/13/2022 with the applicant, John Williams, showed water being diverted from a groundwater well for irrigation uses. At the POD, well 96-96-N-67 uses a Franklin 1.0 HP pump motor to 2ea pressure tanks prior to distribution for the water system. Three 5-gallon bucket flow measurements were taken from a frost-free hydrant co-located with the well, with the average of three resulting in a diversion rate of 0.06 cfs, considering department rounding standards. Based on the observed irrigation acreage, **0.05 cfs** is authorized by the Department & I recommend this rate for licensing this right. The applicant uses the same water system infrastructure for domestic & stockwater uses on the property, so the slightly larger flow rate of 0.06 cfs is not a cause for enlargement concern for licensing this right.

During the field exam, photographs of the irrigation system and irrigation POU were taken, and irrigation acreage was sketched out on field maps. During licensing review ArcMap aerial imagery was used to accurately define the irrigation POU, which equals 1.7 acres. The annual volume associated with the beneficial use equals $1.7 \text{ ac} \times 3.0 \text{ afa} = 5.1 \text{ af}$ which is recommended for licensing the annual & maximum diversion volumes. The water system has buried pipelines to multiple frost-free hydrants, which then use pressurized sprinklers & hoses to various portable rainbird sprinklers, soaker hoses, & micro-emitters to irrigation lawn, landscaping, trees, and stock fields throughout the season of use. Tree canopy doesn't allow visual illustration of irrigation occurring north of the primary residences, which includes a large fenced in dog kennel that is irrigated for lawn space (photographs capture use).

Condition 046 was removed from the permit during licensing review. All other conditions on the permit shall be carried forward to licensing. I have added condition 928 during licensing review to account for the separate beneficial use claim filed by the applicant, which serves to mitigate overlap concerns between WRs related to the ½ acre irrigation included under domestic use from the B.U. claim. Overlap concerns: Oden Water Assn is a municipal service provider with POU for Rights 96-8953 & 96-7011 overlapping this permit's irrigation POU. The applicants assert their property is not served water by the municipal system. Aside from overlap between the applicant's own WR filings with concerns mitigated by inclusion of condition 928, there are no additional 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>
IRRIGATION	04/01 to 10/31	0.05 CFS	5.1 AF

Totals: 0.05 CFS 5.1 AF

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

I. AUTHENTICATION

Luke Bates -

Field Examiner's Name J. J. J. Date 10/27/2023

Reviewer Chae Beek Date _____

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-11093

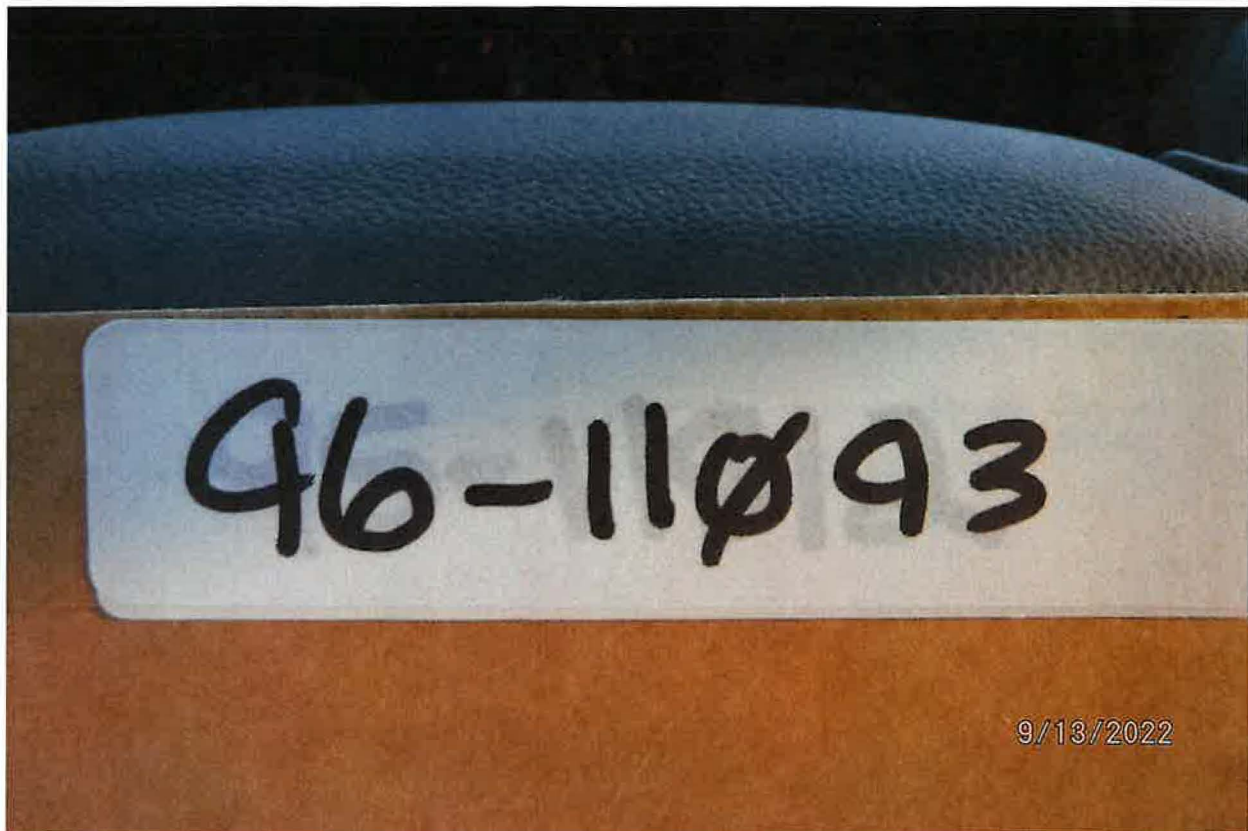
IRRIGATION system diagram.



0 0.035 0.07 0.14 Miles

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

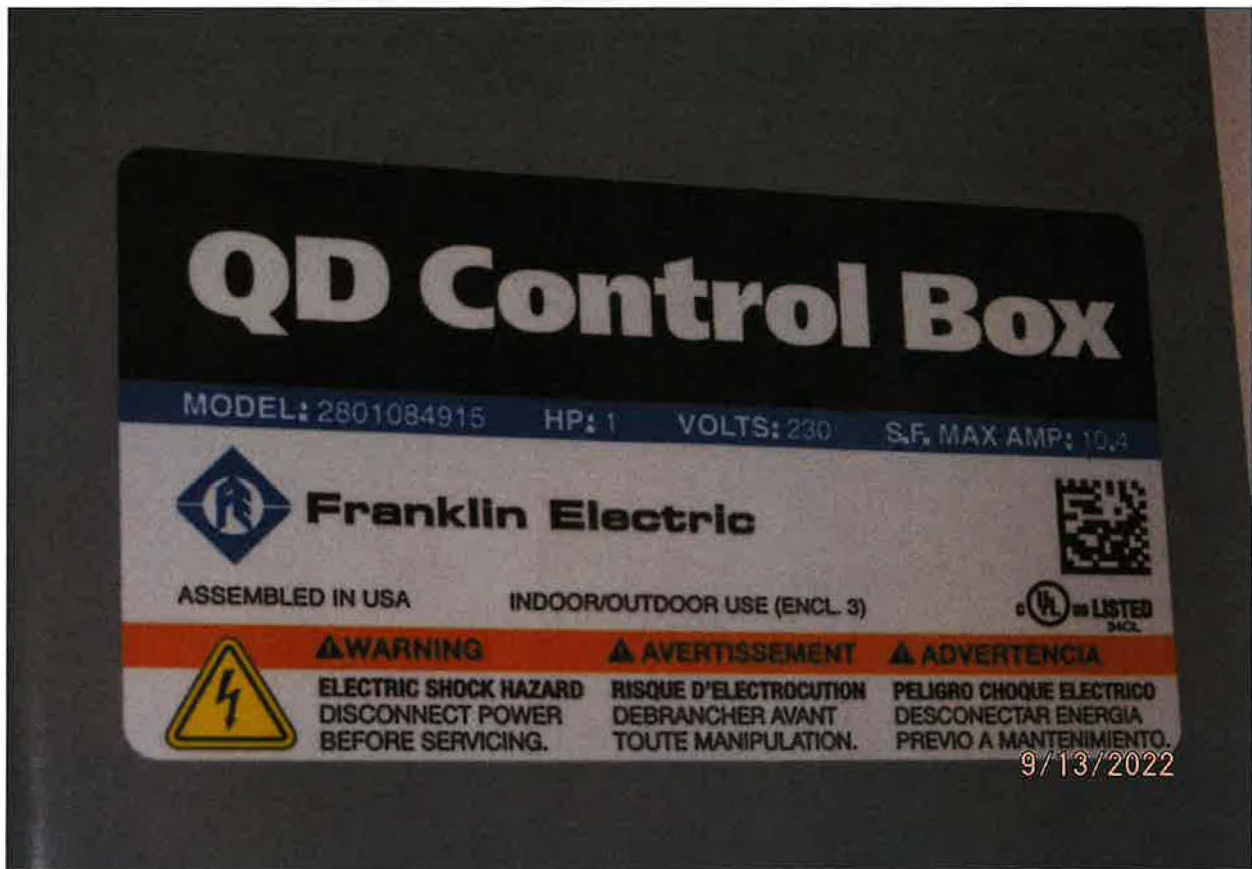




BENEFICIAL USE FIELD EXAMINATION DATE 9/13/2022



POD – WELL 96-96-N-67 NO WELL TAG DATA AVAILABLE



1 HP FRANKLIN ELECTRIC PUMP MOTOR INSTALLED IN WELL



DIVERTING WORKS



WATER SYSTEM INFRASTRUCTURE



IRRIGATION POU



HOSE AND SPRINKLER ON TIMERS FOR IRRIGATION



SOAKER HOSE FOR ORCHARD TREE IRRIGATION



IRRIGATION POU - HOSE AND SPRINKLER FOR LAWN SPACE



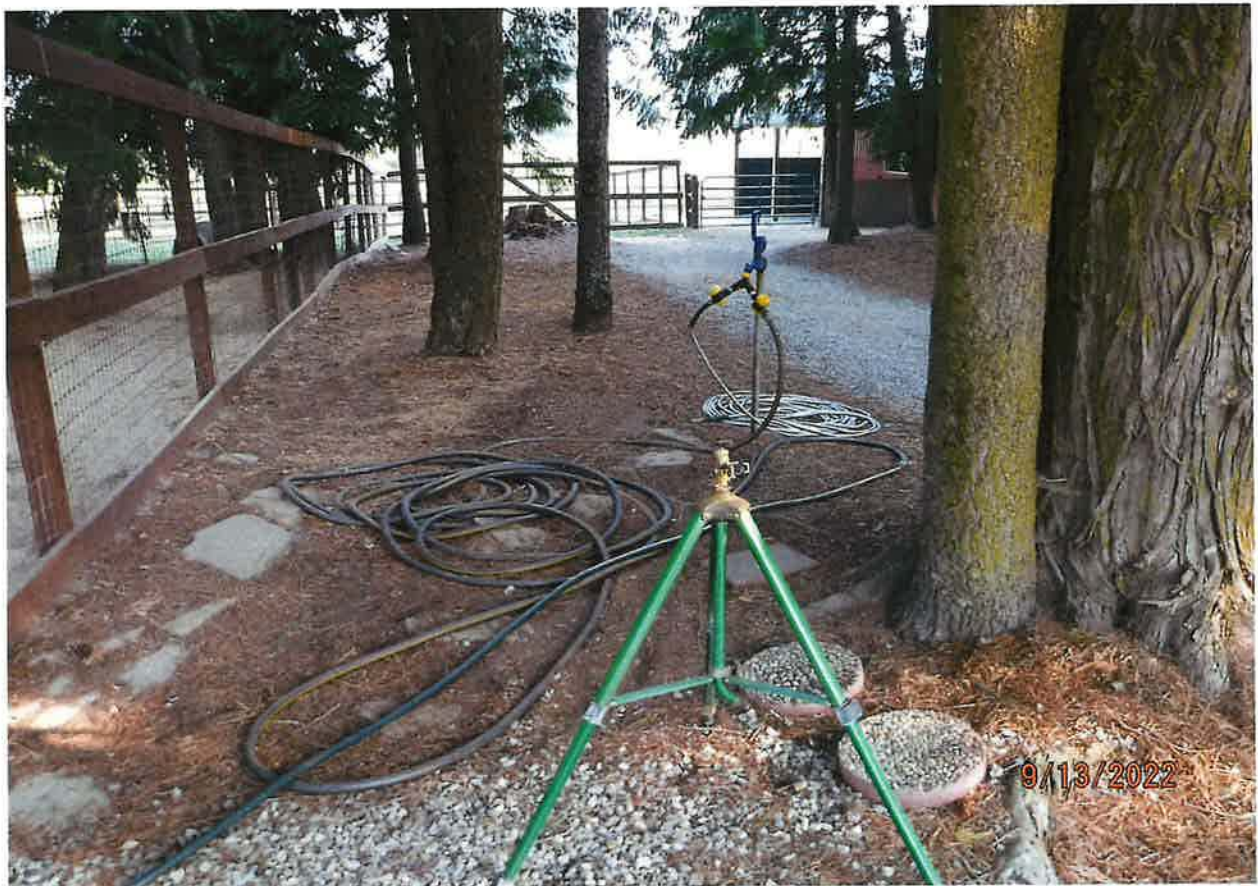


IRRIGATION POU





IRRIGATION POU





IRRIGATION POU





IRRIGATION POU



GRASS ENCLOSED DOG RUN



IRRIGATION POU

