

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-7537
Exam Date: 06/17/2020

1. Current Owner:
RIVER RUN LANDOWNERS ASSN 8708 BOYSENBERRY LP HAYDEN ID 83835
2. Accompanied by: Seth Russler and Darin Krier
Phone No: 859-312-2912
Address: Same as above
Relationship to permit Holder: River Run Landowners Assn Representatives

3. **SOURCE:**
GROUND WATER

Method of Determination: DRG and Arcmap.

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 SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER L6 (SW¼ SE¼), Sec. 25, Twp 50N, Rge 03E, B.M. SHOSHONE County

Method of Determination: POD located at -116° 00.960, 47° 38.923, well permit No. 94-95-N-0027-000.

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	03E	25															1.1 L6	1.3 L8	2.4
50N	03E	25															0.3 L8	0.1	0.4
50N	03E	25															0.2		0.2

Total Acres: 3.0

PLACE OF USE: DOMESTIC

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	03E	25															X L6	X L8	
50N	03E	25															X L8		
50N	03E	25															X		

Method of Determination: Field exam and Arcmap.

3.

X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 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
94-95-N-0027-000	UNKNOWN	3			

D. FLOW MEASUREMENTS

1.

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

2. Measurements: Unable to perform flow measurement due to piping from well going directly into pressure tank.

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method: Theoretical pumping equation estimates flow at 80.8 gpm or **0.18 cfs**, with pump estimated to be at 25 ft and system operating at 40 psi.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3.0 \text{ acres} \times 3.0 \text{ afa} = \mathbf{9.0 \text{ af}}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.09 \text{ cfs} \times 200 \text{ days} \times 1.9835 = 357$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 9.0 \text{ af}$$

2. Volume Calculations for Other Uses:

Domestic annual volume for RV sites = 15 RVs x 50 GPD x 200 days x 2.5 people per RV = 375,000 gallons / 325,850 gal per af = 1.15 af, rounded to **1.2 af** conforming with department admin memo, application processing memo No. 6, Significant Figures for Numerical Values.

Maximum Diversion Volume = 9.0 af (irrigation component) + 1.2 af (domestic component) = **10.2 af**

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 6/17/2020 with applicant's representatives, Seth Russler and Darin Krier, showed a well being used for domestic and irrigation purposes. The well, permit No. 94-95-N-0027-000, has a 3 HP pump that draws water for 15 RV units (with full hook-ups), and irrigation for the 15 associated lots. I was unable to perform a flow measurement because water was diverted directly into a 1,500 gallon storage tank without a proper place to perform measurements. Theoretical pumping equation estimates flow at 80.8 gpm or 0.18 cfs, with pump estimated to be at 25 ft and system operating at 40 psi. Applicant is limited by pump performance for the diversion rate, and **0.18 cfs** will be the domestic component diversion rate and Maximum diversion rate applied to license.

During field exam, 15 RV sites were identified, with full hook up and septic for each slip using water for domestic purposes. Each Tract of the Little Demille Ranch Sub was built up with concrete pads and frost free hydrants, from which water purification systems were attached for domestic use. The domestic annual volume was determined using a DEQ multiplier of 2.5 people per RV site, equaling 15 RVs x 50 GPD x 200 days x 2.5 people per RV = 375,000 gallons / 325,850 gal per af = 1.15 af, rounded to **1.2 af** conforming with department admin memo, application processing memo No. 6, Significant Figures for Numerical Values.

Photographs from exam identified several frost free hydrants and a hose bibs in use to provide irrigation by hoses and sprinkler around RV sites. Acreage for irrigation was identified at time of exam, and traced out using Arcmap resulting in 3.0 acres. The department standard diversion rate applied to irrigation component equals 3.0 acres x 0.03 cfs = **0.09 cfs**. The irrigation annual volume will be limited to **9.0 af** (3.0 acres x 3 AF). The maximum diversion volume equals 1.2 af (domestic component) + 9.0 af (irrigation component) = **10.2 af**, which will be applied at time of licensing.

During licensing review, it was identified that irrigation and domestic POU's were within the SWSE and SESE ¼¼ of section 25, but when permitted the PLS locations for government lots did not reflect current government lot boundaries. As a result, rows were added to both irrigation and domestic POU's to reflect use in SWSE (gov lots 6, 8, and none) and SESE (gov lots 8, and none). This PLS update does not require an amendment, just admin corrections to accurately describe PLS POU. Additionally, Applicant stated the season of use for the domestic component was from 15 April – 31 October annually. The Season of use was adapted to reflect these dates at time of licensing.

Conditions 046 and 26A were removed from license. Condition R62 was replaced with R66 due to irrigated acreage reducing to 3.0 acres, conforming to department standards outlined in admin memo, application processing No.17, Acceptable Rates for Irrigation Flow for Small Acreages. Condition X59 and X60 were added to describe POD and POU locations respectively, located within the Little Demille Ranch Subdivision. All other conditions remain on license. There are no overlap concerns for this WR.

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	0.09 CFS	9.0 AF
DOMESTIC	04/15 to 10/31	0.18 CFS	1.2 AF

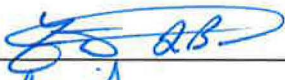
Totals: 0.18 CFS 10.2 AF

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 - Water Resource Agent

Field Examiner's Name  Date 6/24/2020

Reviewer Adm. Franklin Date 6/29/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
94-7537

DOMESTIC and IRRIGATION system diagram



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

0 0.05 0.1 0.2 Miles



THEORETICAL PUMPING EQUATION FOR WR# 94-7537

Theoretical Pumping Equation is required because system did not allow for a proper measurement. Pump is estimated to be at 25 ft, and running at 40 psi.

<u>PUMP EQUATIONS</u>						
WATER RIGHT No. 94-7537						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	$HP \cdot 8.8 \cdot \text{Eff} / H$	3	117.517	0.8	25	40
Q =		0.180 cfs	80.8 gpm			

WELL AND PUMP HOUSE



Maximum Diversion Rate: 0.20 CFS

OF DIVERSION
0.18 CFS
0.15 CFS

GE, B.M., SHOSHONE County

		SE				Totals
SW	SE	NE	NW	SW	SE	
				5.5	2.0	7.5
				L 6	L 8	

IVAL

tted on or before February 01, 2015.

s the land of another.

e date of permit issuance and shall
s satisfaction of the Director of the
umstances over which the permit

arden and landscaping associated with
ght.

of Section 42-235, Idaho Code and

more than 0.02 cfs per acre nor more
lands above.

Idaho Code. Witness the signature of

[Signature] 2019

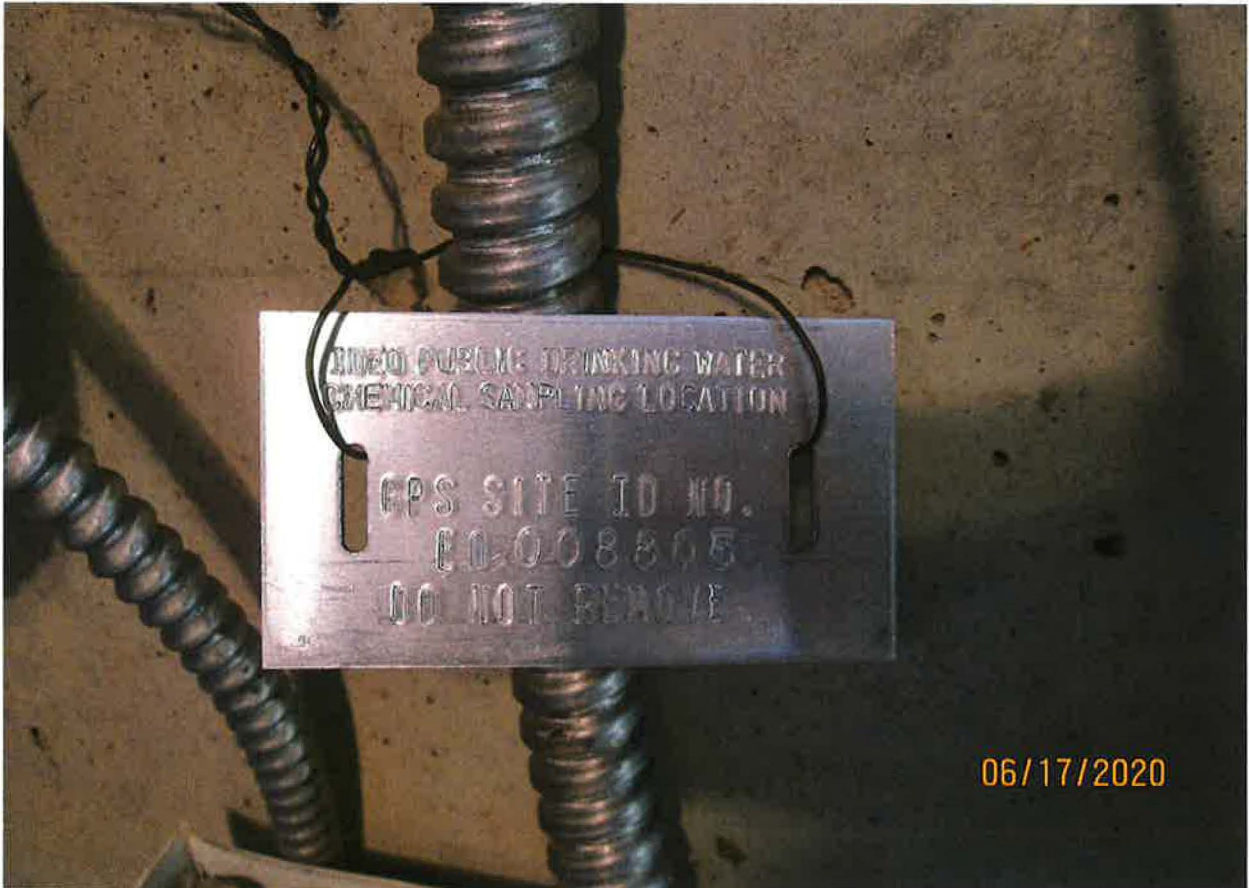
Robert B. [Signature]

94-7537

06/17/2020



POD - WELL



DEQ TAG



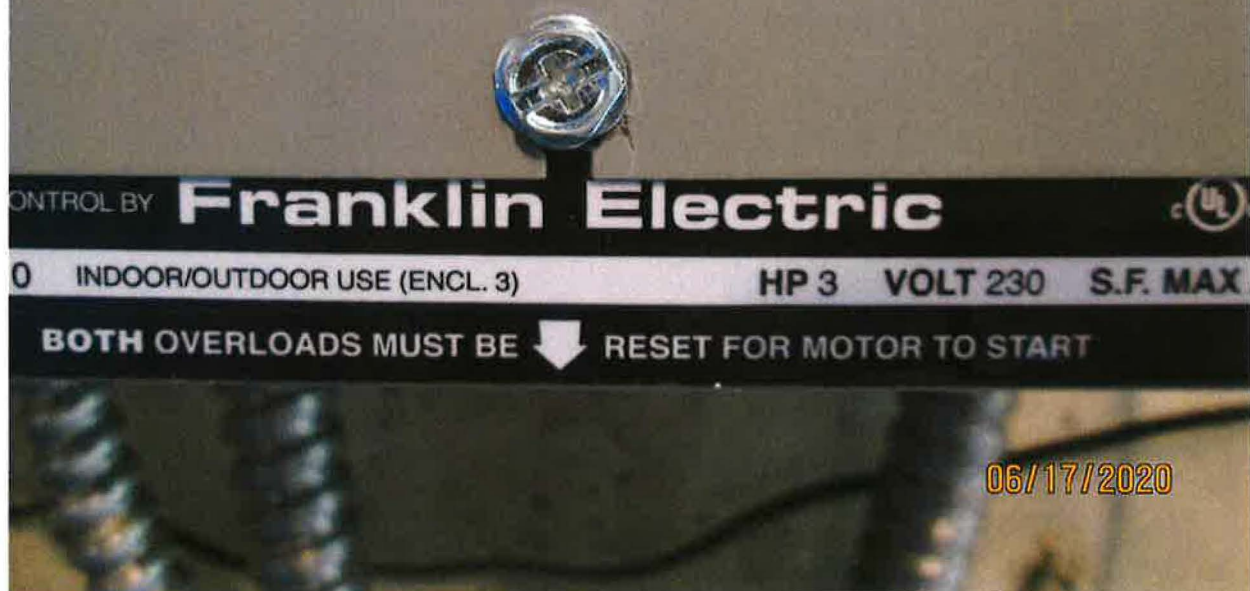
WATER CONVEYANCE SYSTEM

CABLE, PUMP OR MOTOR. DO NOT USE OR TOUCH THIS BOX, PIPES, CABLE, PUMP OR MOTOR UNLESS ALL METAL PARTS HAVE BEEN PROPERLY GROUNDED ACCORDING TO APPLICABLE CODES.

155661101 REV. 6



Franklin Electric
Bluffton, Indiana 48714



FRANKLIN ELECTRIC 3 HP PUMP



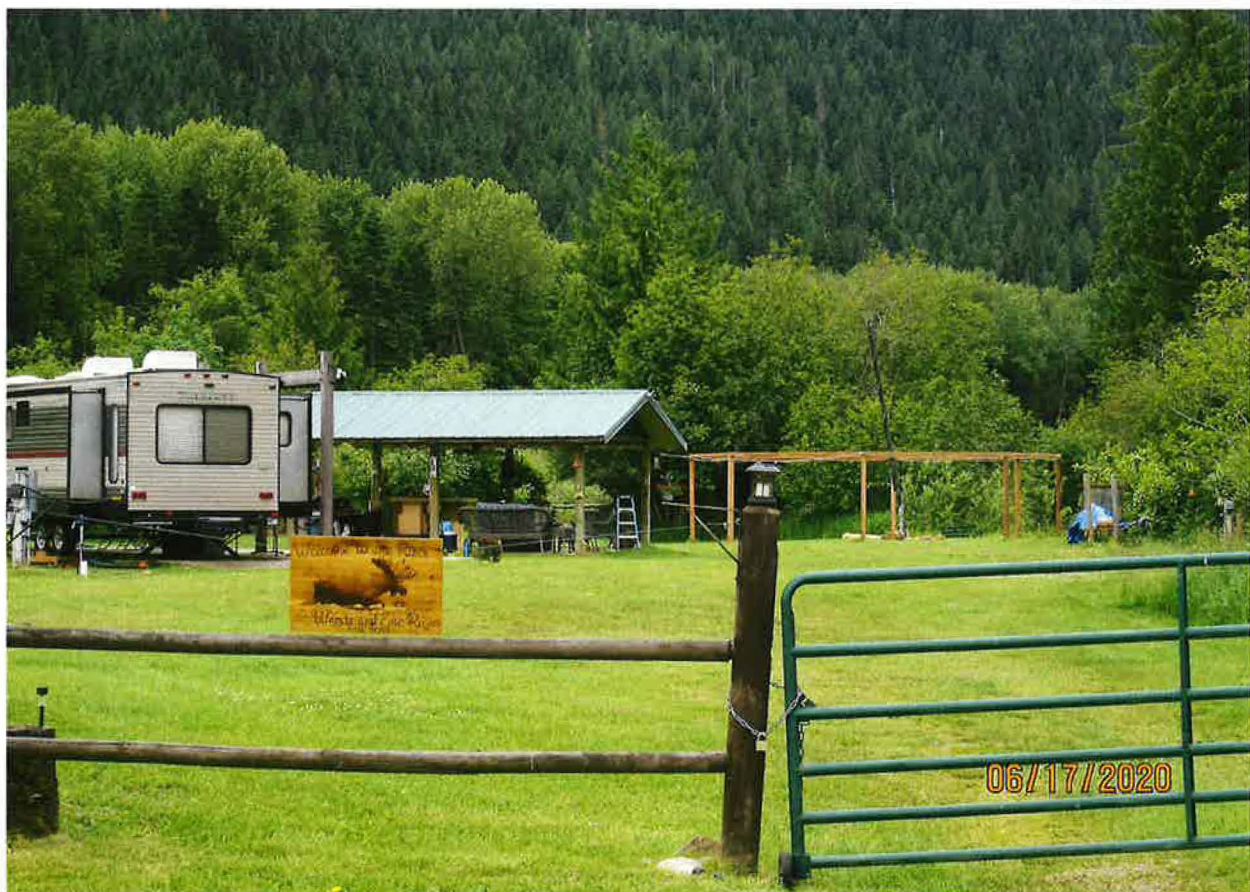
PUMP CONTROL PANELS



DOMESTIC POU (1 OF 15) FULL HOOK UPS INCLUDED



DOMESTIC POU



DOMESTIC AND IRRIGATION POU



IRRIGATION POU





IRRIGATION POU





IRRIGATION POU





DOMESTIC AND IRRIGATION POU





DOMESTIC AND IRRIGATION POU

