

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17463
Exam Date: 04/18/2024

1. Current Owner:
CHELAN INVESTMENTS LLC PO BOX 949 HAYDEN ID 83835-0949
2. Accompanied by: Jeremy Hopson
Phone No: (208) 640-1947
Address: PO BOX 949, HAYDEN, ID 83835-0949
Relationship to permit Holder: Representative

3. SOURCE:
GROUND WATER

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
95-2110	Ground Water	Irrigation	License
95-8470	Ground Water	Domestic	License
95-11554	Ground Water	Domestic	Decreed
Multiple Water Rights	Ground Water	Municipal	Decreed

Comments: First, I want to address the multiple decreed Water Rights listed above which are all Ross Point Water District's and they are water rights 95-4088, 95-7258, 95-7698, 95-8477, 95-9009, & 95-15533. These water rights have no overlap concerns. They are a completely separate system which does not connect to water right 95-11554.

The licensed water right 95-2110 was split and the child right is 95-15533 which was decreed. The parent right 95-2110 did not file a claim to this water right. 95-15533 is addressed with Ross Point Water District. There are no overlap concerns.

The licensed Water Right 95-8470 place of use does overlap this right and no claim was required in the CSRBA adjudication due to the domestic exemption for the Kootenai County Baptist Church. The decreed Water Right 95-11554 is also a direct overlap for Domestic use for a church with restrooms and a kitchen. Condition X35 is being added for licensing 95-17463, which describes that the three WRs when combined shall not exceed the Domestic Use of 0.6 afa. Condition X35 mitigates concerns for stacking of water rights due to overlapping water usage between rights.

2. Other water rights with the same point-of-diversion: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
95-11554	Ground Water	Domestic	Decreed

Comments: Water rights 95-8470, 95-11554 & 95-17463 share the same point of diversion. There is a direct overlap of these rights using the same well. Condition X35 mitigates concerns for stacking diversion rates and volume of these water rights due to overlap.

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE¼ NE¼, Sec. 25, Twp 51N, Rge 05W, B.M. KOOTENAI County

Method of Determination: Aerial photography, Kootenai County tax parcel maps, and ArcMap data.

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	
51N	05W	25	2.0																2.0

Total Acres: 2.0

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	
51N	05W	25	X																

Method of Determination: Aerial photography, Kootenai County tax parcel maps, and ArcMap data.

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
95-84-N-95	Franklin Electric	3 HP			

D. FLOW MEASUREMENTS

I was unable to perform flow measurements due to inadequate pipe requirements. I used theoretic pump equations to calculate during licensing review which gives a maximum diversion rate of 27 gpm or 0.06 cfs considering department rounding standards.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method:

The diversion rate for the domestic beneficial use component of this right is limited to **0.02 cfs** or **9 GPM**.

The diversion rate for the irrigation beneficial use component of this right is limited to **0.06 cfs** or **27 GPM**.

The maximum diversion rate for this right is limited to **0.08 cfs** based on theoretical pump equation derived flow rates for the 3 HP Franklin Electric pump at depth of 258 ft with system operating pressure of 40 PSI. The irrigation department standard diversion rate equals 0.06 cfs for two acres measured at time of field exam. The domestic use does qualify for Domestic Part B of less than 2,500 gallons per day but due to the new owner, I don't want to limit the new owner because the church has moved. I decided to allow 0.02 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2 \text{ acres} \times 3.0 \text{ afa} = 6.0 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.06 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 25 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 6.0 \text{ afa}$$

2. Volume Calculations for Other Uses:

Domestic annual volume = **0.6 af** for 1 church with restrooms & kitchen.

G. NARRATIVE/REMARKS/COMMENTS

Field exam was performed on 4/18/2024 with Jeremy Hopson, which showed a groundwater well being used for irrigation and domestic purposes. At the POD, there is a 258 foot well drilled in 1984, tag #95-84-N-95. The pump is a Franklin Electric 3 HP pump. Department staff were unable to perform flow measurements due to inadequate pipe requirements. A Theoretic Pump Equation was developed with the 3HP pump installed at 258 ft operating at 40 PSI deriving a flow rate of 27 gpm or 0.06 cfs considering department rounding standards, which is recommended for licensing this water right. Both the domestic & irrigation beneficial use component diversion rates are reduced from their permit approved values of 0.16 cfs with the 3 HP pump performance being the limiting factor on maximum diversion rates. The irrigation and the domestic use do not divert the total 0.08 cfs at one time which is why I am justifying the 0.08 cfs total with a volume of 6.6 acre feet annually.

This permit qualifies for an in-house examination. Overlapping water right concerns have been evaluated, and I've recommended addition of condition X35 based on POD and POU overlap between Rights 95-8470, 95-11554 & 95-17463.

I used ArcMap aerial imagery, Google Earth software, and Bonner County GIS tax parcel maps to evaluate the irrigation POU, which equals 2 acres of lawn and landscape. I assigned the domestic POU shape for the church located on the same parcel. The diversion rate(s) and volume(s) have been discussed above, but I'm recommending licensing with a maximum diversion rate of 0.08 cfs and maximum diversion volume of 6.6 afa.

There is evidence of irrigation of 2 acres when drawn out in ArcMap. I have based the diversion rate and the volume using department standards. The church has approximately 150 members. They have 2 services each week. There are several other meetings during the week with different numbers of people attending, which I estimate at 50 people. There are 3-4 staff members there every day of the week. Using this information, the domestic use does meet the 2,500 gals per day or less qualification for Domestic Use Part B.

I removed conditions 26A and 046 during licensing review. As discussed above, I've added condition X35 to describe combined use limitations between 95-8470, 95-11554 & 95-17463 associated with diversion rates. All other conditions shall be carried to license approval.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
IRRIGATION	03/15 to 11/15	0.06 CFS	6.0 AF
DOMESTIC	01/01 to 12/31	0.02 CFS	0.6 AF

Totals: 0.08 CFS 6.6 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 Alleman Date 4/29/25

Reviewer Chen Belf Date 5/1/25

THEORETICAL PUMPING EQUATION(S) FOR WR# 95-17463

Theoretical Pumping Equation is required because system did not allow for a proper measurement. Pump is estimated to lift 258 ft, and running at 50 psi.

PUMP EQUATION

WATER RIGHT No. 95-17276

CENTRIFUGAL PUMP	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q = HP*8.8*Eff/H	3	350.517	0.8	258	40

Q = **0.060 cfs** **27.1 gpm**



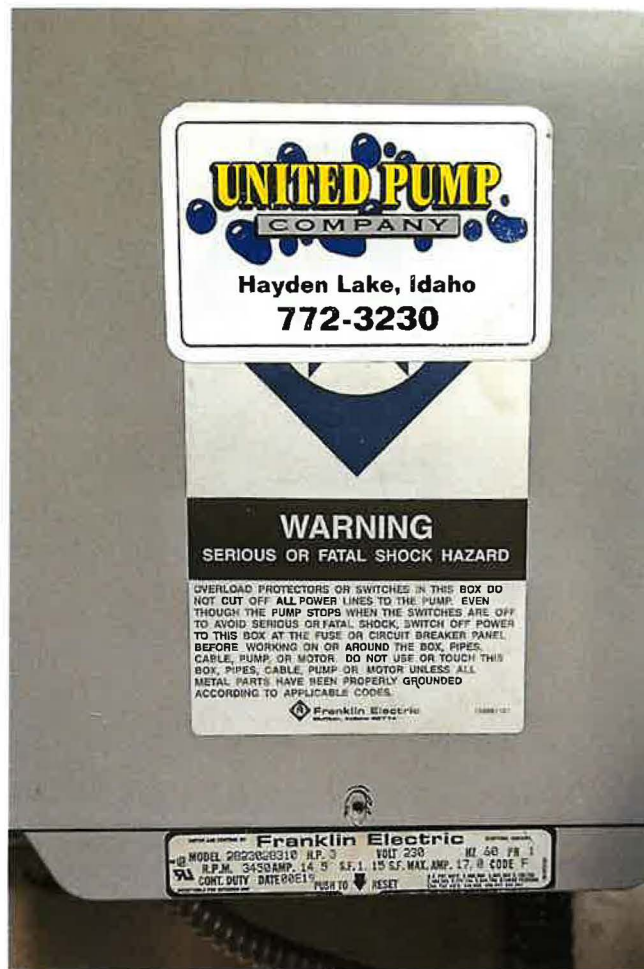
Groundwater Well Tag #95-84-N-95





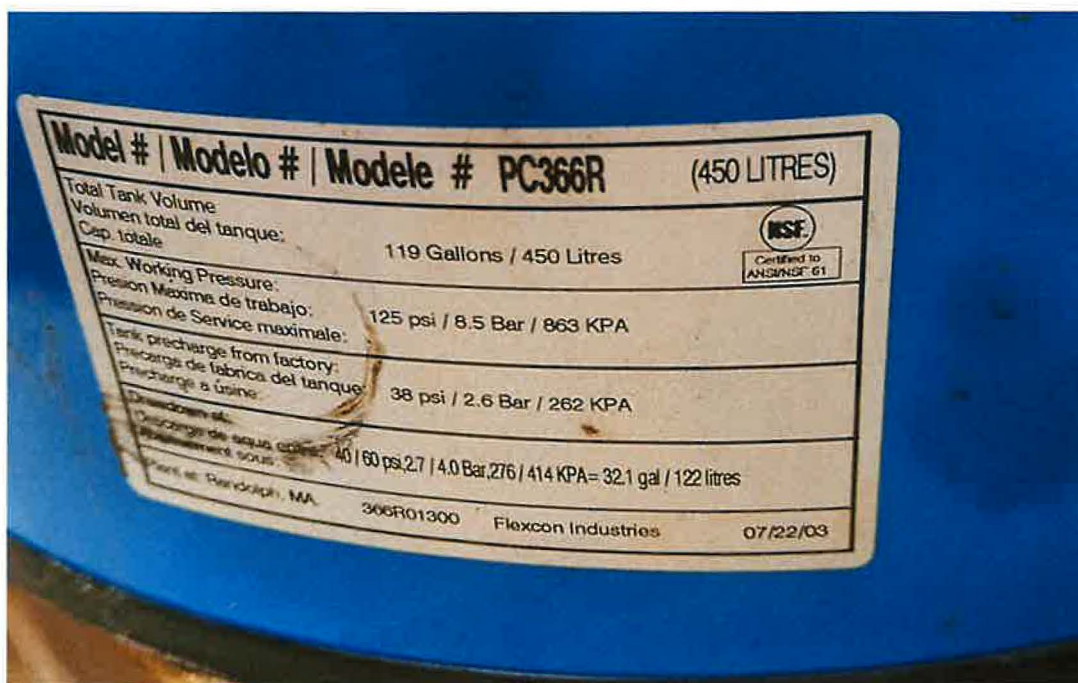
Sprinkler manifold & Well





Franklin Electric 3 HP Pump Model #2823028310

Pressure Tank 40 PSI (119 Gallons)





Pressure Tank



Domestic Use Church with Kitchen and bathrooms





Kitchen & Swamp Cooler





Domestic Use & Landscaping





Irrigation





Irrigation Lines





Irrigation lines

