

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONPermit No: 85-15716Exam Date: 5/4/2021

1. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? X Y N
- a. Irrigation of 5 acres or less
 - b. Storage of up to 14.6 AF for stockwater purposes only
 - c. Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 - d. Other < >

2. Current Owner: Name: Brendon Swenson
Owner of Record Correct? X Y N
Address of Record Correct? Y N
If No: Address

The Department's parcel data shows Brendon and Katherine Swenson as the owners of the property. Mr. Swenson is listed as the owner of the property due to a recently approved assignment of permit, so I don't see any issues with the ownership of these rights.

3. Beneficial Use Fees have been paid: X Y N Receipt No: C110150

4. SOURCE TRIBUTARY

Ground Water

Method of Determination: GIS, Well Driller's Report, and Tax Parcel DataChange in Source: Y X N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no overlapping water rights in this 40 acre tract.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no overlapping water rights in this 40 acre tract.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Well Tag # D0054438			SW	SW	2	35N	5W	B.M.	NEZ PERCE
								B.M.	
								B.M.	

Method of Determination: GIS, Well Driller's Report, and Tax Parcel Data.

Please Note: The well driller's report places the well on the south side of the cul-de-sac. The permit holder informed me that the well is on the property on the north side of the cul-de-sac, and the photos show it is just west of the duplex.

Change in POD? X N Amendment Required? X N**2. PLACE OF USE:** Use: Domestic

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
35N	5W	2											3.8						3.8
35N	5W	2											D						
35N	5W	2											S						
Total Acres =																			3.8

Method of Determination: GIS and Tax Parcel DataChange in POU? X N Amendment Required? X N Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

 X Aerial Photo Attached (required for irrigation of 10+ acres). Photo of Diversion and System Attached

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well Pump	Unknown				

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

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

2. Measurements: No measurement is required for an in-house exam.

E. FLOW CALCULATIONS

___ Additional Computation Sheets Attached

Measured Method:

The file states that there is a 5 Hp pump in the well. According to the well driller's report, the static water level of this well is 585 feet. Allowing for 10 to 20 feet of drawdown and a standard pressure of 50 psi, the following calculations show a possible diversion rate of 333 cfs $([8.8 \times 5 \times 0.71] / [595 + \{50 \times 2.31\}]) = 0.04 \text{ cfs}$. I do not feel it is we should limit this permit to original well pump that was in the well prior to the development of the permit. Therefore, I am going to recommend the diversion rates based on Administrative Processing Memorandums 3, 22, and 17.

Administrative Memo #3 = 0.02 cfs for stockwater for 1-10 head of range cattle or horses

Administrative Memo #22 = 0.04 cfs for domestic use

Administrative Memo #17 = 0.03 cfs per acre for 3.8 acres for a total of 0.11 cfs for irrigation

Total diversion rate would be 0.17 cfs.

The permit limited the domestic use to 0.02 cfs and the irrigation use was limited to a total of 5 acres at 0.03 cfs per acre or 0.15 cfs with a total diversion rate of 0.19 cfs.

I am recommending 0.02 cfs for stockwater, 0.02 cfs for domestic use and 0.11 cfs of irrigation for a total of 0.15 cfs as recommended by the Administrative Memorandums and the limitation of the domestic use in the permit.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3.8 \text{ acres} \times 4 = 15.2 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.11 \text{ cfs} \times 289 \text{ days} \times 1.9835 = 63.1 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 15.2 \text{ af}$$

2. Volume Calculations for Other Uses:

Administrative Processing Memorandum #22 provides guidance to allow 0.6 af for in-house use. Administrative Processing Memorandum #3 allows 0.2 af for 1 – 10 head of cattle. The permit is for 4 head of cattle.

G. PURPOSE OF USE

Irrigation X Y N # Stock 4 Domestic # of Homes 1

Other: < >

Change in Purpose of Use? Y N

Method of Determination: Taxlot data and conversations with owner.

If Yes: From Use To Use Amount CFS AFA

H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-house examination. This permit authorizes the use of ground water to supply a home, water livestock and supply irrigation.

It is very difficult to determine the actual size of pump that is currently in this system. Taking this into account, I did not feel it was reasonable to limit the pumping system to just the well pump in the well at the time of the application for permit. If we did this, then they would not be able to adequately irrigate this property. An extension of time was filed in 2016 to finish the system. The extension of time claims that the majority of the system was installed, but the entire property were not being irrigated. This suggests that there was a limit on the well originally installed on this system. The Sentinel imagery shows the entire property was irrigated in 2021, so I feel they had to have installed a bigger well pump. Without the ability to verify the size of the well pump in the system, I feel we need to follow the standards put forth in the Administrative Memorandums to avoid shorting the permit holder if a larger well pump was installed in the well.

Another issue I found was that it does appear that a portion of the tax parcel is located in the SESW of Section 2 in Township 35 North, Range 5 West. However, the tax parcels suggest that the entire property is entirely in the SWSW in Section 2. It appears as though the registration of our maps, aerial photography and the tax parcels were really don't appear to mesh up correctly. Therefore, the shape file will look as though a portion of this water right may be in the SESW of Section 2, but the entire place of use in the database will be shown in the SWSW of Section 2.

A review of Department's NAIP aerial imagery show that the pastures for this property have been cultivated, but it doesn't appear as though they have actually been irrigated. The Sentinel areal imagery clearly shows the ground was irrigated in 2021. I have included an image of the April 14, 2021, imagery that shows the entire property is being irrigated.

Conditions 132 and R66 should be carried forward to licensing. The remaining conditions should not be included on the license. No additional conditions are needed.

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

I. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
Domestic	01/01 to 12/31	0.04 CFS	0.6 AFA
Stockwater	01/01 to 12/31	0.02 CFS	0.2 AFA
Irrigation	02/15 to 11/30	0.11 CFS	15.2 AFA
Totals:		0.17 CFS	16.0 AFA

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

Other: < >

J. AUTHENTICATION – DANIEL A. NELSON – WATER RIGHT ANALYST 3

Field Examiner's Name



Date

5-6-21

Reviewer



Date

5/6/21

Field Exam Map:

The yellow border shows the place of use for the irrigation use. The purple border shows the place of use for the stockwater and domestic uses. The yellow point shows the point of diversion. The green borders show the tax parcels for this property.



April 14, 2021, Sentinel Imagery of property showing that irrigation has occurred. There are a number of areas in this area that show lands that are not irrigated. The red area shows the lands that have been irrigated.

