

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

A. GENERAL INFORMATION

Exam Date: 2/12/2025

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

2. Current Owner: Idaho Fish and Game Commission
- Owner of Record Correct? X Y N
- Address of Record Correct? X Y N
- If No Explain:

3. Beneficial Use Fees have been paid: x Y N Receipt No: Interagency Billing.

4. Source: Tributary:
- GROUND WATER N/A

Method of Determination: GIS ArcMap Tools, Aerial Imagery, and Taxlot Data.

Change in Source: Y x N

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
Numerous			

Comments: There are numerous water rights with seemingly overlapping place of use (POUs), but they are all held by the City of Nampa, the Boise Project Board of Control, the Nampa & Meridian Irrigation District, the Bureau of Reclamation, or they are for neighboring properties.

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

Water Right No.	Source	Purpose of Use	Basis

Comments:

C. DIVERSION AND DELIVERY SYSTEM

1. Location of Point(s) of Diversion:

Source	Govt. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.		County
Ground Water			SE	SE	3	02N	02W	B.M.	Canyon

Method of Determination: GIS and Taxlot data.

Change in POD? Y x N Amendment Required? Y x N

2. Place of Use: Irrigation

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	02W	3																0.5	
		Lot #																	
Total Acres =																		0.5	

Place of 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	
02N	02W	3																X	
		Lot #																	

Method of Determination: GIS, Tax Parcel Data, and 2023 Canyon County Aerial Imagery.

Change in POU? ____Y __x__N Amendment Required? ____Y __x__N

3. Diversion System Information:

Description:

____ Delivery System Diagram Attached. (mark all major components and distances between components)

__x__ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required).

__x__ Aerial Photo Attached (required)

____ Photo of Diversion and System Attached

3. Diversion Id No.*	Motor Make	HP	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
N/A	N/A	1.5	N/A	N/A	N/A

*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
N/A	N/A	N/A	N/A	N/A	N/A	N/A

2. Measurement Comments:

No measurement is required for an in-office examination per IDAPA 37.03.02.035.01.r.

E. FLOW CALCULATIONS

____Additional Computation Sheets Attached

Measured Method: (acres irrigated) x (generic diversion rate) = (0.5 acres) x (0.03 cfs/acre)= 0.015 cfs, which rounds to 0.02 cfs.

0.08 cfs is standard for 3 homes per Application Processing Memo #22.

The permit holders stated that they have a 1.5 horsepower pump, which I used for calculations of a theoretical diversion rate (Q).

$$Q = \frac{\text{Conversion Factor to cfs} * \text{Efficiency of pump (\%)} * \text{Horse Power}}{\text{depth to water} + 2.31 * \text{psi}}$$

$$Q = \frac{8.8 * 0.7 * 1.5}{2 + 2.31 * 50}$$

$$Q = 0.08 \text{ cfs}$$

The following values in the theoretical equation are estimates and were not measured: Efficiency of pump (70%) and a common lower end pressure rating irrigation (50 psi). This calculation yields an amount that is less than the total diversion rate authorized under the permit, which is 0.1 cfs. However, because the difference in values is only 0.02 cfs and this calculation is partly based on theoretical and estimated values, I am still recommending the total diversion rate as 0.1 cfs.

Comments:

No measurement is required for an in-office examination per IDAPA 37.03.02.035.01.r.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \text{ acres} \times 4.5 \text{ acre feet} = 2.3 \text{ acre feet}$.

I.R.

$V = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.02 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 10.3 \text{ acre feet}$.

$V = \text{Smaller of } V_{\text{I.R.}} \text{ and } V_{\text{D.R.}} = 2.3 \text{ acre feet}$.

I.R. D.R.

2. Volume Calculations for Other Uses:

Domestic: Application Processing Memo #22 lists a typical volume of 0.6 AF per home when irrigation is separated.

0.6 AF x 3 homes = 1.8 AF.

Comments:

G. PURPOSE OF USE

Irrigation ☐ x ☐ Y ☐ N # Stock _____ Domestic # of Homes ☐ 3 _____

Other: < >

Change in Purpose of Use? ☐ Y ☐ x ☐ N

Method of Determination: GIS, Tax Parcel Data, 2023 Canyon County Aerial Imagery, and the permit holders Statement of Completion for Proof of Beneficial Use.

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA _____

H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-office exam because it is for irrigation of 5 acres or less and it is also for domestic use for less than 0.24 cfs. The exam was conducted on February 12, 2025, by Jared Klay. At the time of the exam, ownership of the permit is in the name of the Idaho Fish and Game Commission. Current Canyon County taxlot data represents the Idaho Department of Fish and Game owns the land appurtenant to the place of use (POU) and point of diversion (POD). Proof of Beneficial use was submitted on April 24, 2024.

In section 5 of the proof of beneficial use the permit holder described the system as a "6" diameter air rotary drilled well with steel casing. 1 ½ HP 25 GPM quick pack pump". The place of use for irrigation was described as 0.5 acres on both the application and the permit. Further review using Google Earth Imagery and GIS data confirmed this acreage. Thus, I am recommending 0.02 cfs and 3.2 af for irrigation. Aerial imagery also confirmed 3 domestic structures, so I am recommending 0.08 cfs and 1.8 af for domestic use. A theoretical calculation yielded a system capacity of 0.08 cfs. However, because this value is close to the permitted maximum diversion rate of 0.1 cfs, and also because the calculation utilizes theoretical and estimated values, I am still recommending the total diversion rate as 0.1 cfs. I am also updating the period of use from 03/15-11/15 to 3/01-11/15.

All the conditions of this permit have been met. Condition 046 will be dropped because we have received the well driller's report and statement of completion of beneficial use. Condition R69 was added to the permit but will be replaced with Condition X31 on the license because the irrigation is under 1 acre. Condition 121 will be replaced with Condition 103 per the usage description. All other conditions on the permit will be carried over to the license.

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

I. RECOMMENDATIONS

1. Recommended Amounts:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Irrigation	03/01-11/15	0.02 CFS	2.3 AF
Domestic	01/01-12/31	0.08 CFS	1.8 AF
	<u>Totals:</u>	0.1 CFS	4.1 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

J. AUTHENTICATION – Jared Klay

Field Examiner's Jared Klay Date 4/28/25

Reviewer Thomson Date 8/8/25

Map showing the authorized point of diversion (yellow point) and irrigated place of use (yellow outline).



Map showing the authorized point of diversion (yellow point) and place of use (yellow outline) for domestic use.



Google Earth Imagery (dated 7/2024).

