

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

A. GENERAL INFORMATIONExam Date: 4/18/2024

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. Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
d. Other < >
2. Current Owner: Daniel and Shelece Garn
Owner of Record Correct? N
Address of Record Correct? N
If No Explain: N/A
3. Beneficial Use Fees have been paid: X Y N Receipt No: N044483
4. Source: Hayden Lake Tributary: Sinks

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

Change 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
Various	Groundwater, Hayden Lake	Municipal	License, Claim
Various	Hayden Lake	Domestic	
95-8731	Hayden Lake	Irrigation	

Comments: There are various domestic water rights and irrigation right 95-8731 overlapping the permitted place of use according to the GIS place of use shapefiles. However, after reviewing the water right backfiles it confirmed they do not overlap. There are also various municipal water rights held by the North Kootenai Water District overlapping the permitted place of use. However, the applicants can establish their own water right without overlap concerns.

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

Water Right No.	Source	Purpose of Use	Basis
N/A			

Comments: N/A

C. DIVERSION AND DELIVERY SYSTEM

1. Location of Point(s) of Diversion:

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Hayden Lake			SW	NE	10	51N	03W	B.M.	Kootenai

Method of Determination: GIS and Tax Parcel Data.

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

2. Place of Use: Irrigation, 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	
51N	03W	10	0.4, D	0.6, D	0.7, D	0.1, D													1.8
		Lot #	1	2	5	5													
Total Acres =																			1.8

Method of Determination: GIS, Tax Parcel Data, and 2023 Kootenai County Aerial Imagery.Change in POU? Y X N Amendment Required? Y X NDelivery System Diagram Attached (required). Indicate all major components and distances between components.X Aerial Imagery indicating the location of theX Aerial Photo Attached (required for irrigation of 10+ acres).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					

*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						

2. Measurement Comments: The permit holder did not provide pump horsepower. Therefore, a diversion rate calculation is not possible.**E. FLOW CALCULATIONS**Additional Computation Sheets Attached

Measured Method: Since the permit holder did not provide a pump horsepower a diversion rate calculation was not possible. According to Administrative Processing Memo #17 the standard diversion rate/acre for the irrigation of 5 acres or less is 0.03 cfs/acre. According to Administrative Processing Memo #22 the standard diversion rate for a single-family home is 0.04 cfs. I am recommending a diversion rate of 0.04 cfs for domestic use and 0.05 cfs for irrigation or 0.09 cfs total.

(1.8 acres) * (0.03 cfs/acre) = 0.054 cfs or 0.05 cfs rounded.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = (1.8 \text{ acres}) \times (3.0 \text{ af/acre}) = 5.4 \text{ af}$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 5.4 \text{ af}$$

2. Volume Calculations for Other Uses: The permit authorizes in house domestic use. The ½ acre of irrigation usually associated with domestic use is included under the irrigation portion. According to Administrative Processing Memo #22 the standard volume for a single in-house domestic use is 0.6 af. I am recommending a volume of 0.6 af for domestic use and 5.4 af for irrigation or 6 af total.

G. PURPOSE OF USEIrrigation ☒ Y ☐ N # Stock N/A Domestic # of Homes 1Change in Purpose of Use? ☐ Y ☒ NMethod of Determination: GIS, Tax Parcel Data, 2023 Kootenai County Aerial Imagery, and the permit holders Statement of Completion for Proof of Beneficial Use.**H. NARRATIVE/REMARKS/COMMENTS**

This permit qualifies for an in-office examination. According to Tax Parcel Data the property was developed in 1987. The permit authorized in house domestic use and the irrigation of 2.9 acres diverting from Hayden Lake. According to 2023 Kootenai County Aerial Imagery 1.8 acres of irrigation was developed within the development period. The Tax Parcel Boundary and visual property boundary were inconsistent. The visual property boundary was used to determine the irrigated place of use. Two conditions on the permit require the permit holder to install a fish screen with perforations of 1/4 in or smaller and an approach velocity of no greater than 0.5 ft/sec. The permit holder confirmed a fish screen meeting these requirements was installed on their Proof Statement.

Since the permit holder did not provide a pump horsepower a diversion rate calculation was not possible. The standards set in Administrative Processing Memos #17 and #22 were used to make a diversion rate and volume recommendation. The permit authorized in house domestic use. The 1/2 acre of yard irrigation usually associated with domestic use is included with the irrigation portion. I recommend the volume for domestic use should only be for in house use. All of the conditions have been met and development of the permitted beneficial use was confirmed within authorization on the permit. Therefore, I am recommending a 0.09 cfs diversion rate and 6 af volume.

All of the conditions on the permit should remain on the license.Have conditions of permit approval been met? ☒ 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	03/15- 11/15	0.05 CFS	5.4 AF
Domestic	01/01-12/31	0.04 CFS	0.6 AF
	<u>Totals:</u>	0.09 CFS	6.0 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**J. AUTHENTICATION**Field Examiner: **Skyler Cheever – Water Resource Agent**Field Examiner's  Date 4/18/2024Reviewer  Date 4/23/24

Field Exam Map

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



2023 Kootenai County Aerial Imagery

Imagery indicated 1.8 acres of irrigation occurred within the development period.

