

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

A. GENERAL INFORMATIONExam Date: 7/20/2023

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. X Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
- d. Other < >
2. Current Owner: Christine and Lawrence Duarte
- 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: C116731
4. Source: Tributary:
- Twin Lakes Rathdrum Creek

Method of Determination:

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
N/A			

Comments: N/A

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
Twin Lakes	4		SW	NW	1	52N	05W	B.M.	Kootenai
								B.M.	
								B.M.	

Method of Determination: GIS and Tax Parcel Data.Change in POD? Y X N Amendment Required? Y X N

2. 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	
52N	05W	1							D										N/A
		Lot #							4										N/A

Method of Determination: GIS, Tax Parcel Data, 2022 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.

Indicate weir size/pipe as applicable:

X 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
		1.5		Pacific Hydrostar	69296

*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 provided a pump horsepower of 1.5 and a lift of 78 ft could be determined. Therefore, a diversion rate calculation is possible.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: Since the permit holder provided a pump horsepower of 1.5 and a lift of 78ft was determined a diversion rate calculation is possible. According to the calculation the system can handle 0.05 cfs at 40 psi. According to Administrative Processing Memo #22 the standard diversion rate for a single-family home is 0.04 cfs. The permit authorizes 0.04 cfs. I am recommending a 0.04 cfs diversion rate.

$$Q = (1.5 \text{ hp}) (8.8) (0.70 \text{ efficiency}) / (78 \text{ ft lift}) + (2.31) * (40 \text{ psi}) = 0.05 \text{ cfs}$$

Measurement = 0.05 cfs

Permit allowed = 0.04 cfs

2. Volume Calculations for Other Uses: According to Administrative Processing Memo #22 the standard diversion volume for a single domestic use is 0.6 af for in house use and 0.6 af for up to ½ an acre of yard irrigation, or 1.2 af. I am recommending a 1.2 af diversion volume.

G. PURPOSE OF USE

Irrigation X Y N # Stock N/A Domestic # of Homes 1

Other: < >

Change in Purpose of Use? Y X NMethod of Determination: GIS, Tax Parcel Data and 2022 Kootenai County Aerial Imagery.

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

H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-office examination. According to Tax Parcel Data the property was developed in 1984. According to 2022 Kootenai County Aerial Imagery irrigation and a home were confirmed within the place of use. The permit holder confirmed in their Statement of Completion for Proof of Beneficial Use that a fish screen was installed meeting the requirements of the Idaho Department of Fish and Game. Since the permit holder provided a pump horsepower of 1.5 a diversion rate calculation was possible. According to the calculation the system could handle 0.05 cfs at 40 psi. The standards set in Administrative Processing Memo #22 were used to make a diversion rate and volume recommendation. All of the conditions have been met and it has been confirmed a beneficial use was developed within authorization of the permit. Therefore, I am recommending a 0.04 cfs diversion rate and 1.2 af diversion volume.

Conditions X15, X01, 187, R05, and 004 should remain on the license. Condition 26A should be removed as standard with licensing. All other conditions should be removed as standard with licensing.

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>
Domestic	01/01-12/31	0.04 CFS	1.2 AF
	<u>Totals:</u>	0.04 CFS	1.2 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

Other: < >

J. AUTHENTICATION Skyler Cheever – Water Resource Agent

Field Examiner's  Date 7/70/2023

Reviewer  Date 7/4/2024

Field Exam Map

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



Evidence of Irrigation and Home

2022 Kootenai County Aerial Imagery confirming irrigation on the property near the home.

