

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

A. GENERAL INFORMATIONPermit No: 96-16697Exam Date: 8/21/2024

1. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? ☒ Yes ☐ No
- a. ☒ Irrigation of 5 acres or less
- b. ☐ Storage of up to 14.6 acre-feet ("AF") for stockwater purposes only
- c. ☒ Combined diversion rate is less than 0.24 cubic feet per second ("cfs")

2. Current Owner: Name: Roger C Brincken and Barbara A Brincken
- Owner of Record Correct? ☒ Yes ☐ No
- Address of Record Correct? ☒ Yes ☐ No

3. Beneficial Use Fees have been paid: ☒ Yes ☐ No Receipt No: N044716

4. SOURCE**TRIBUTARY**

Pend Oreille River

Columbia River

Method of Determination: Photos of diverting works submitted by the permit holders with their Statement of Completion for Submitting Proof of Beneficial Use ("Statement of Completion").

Change in Source: ☐ Yes ☒ No

B. OVERLAP REVIEW

1. Other water rights with the same place of use: ☒ Yes ☐ No

Water Right No.	Source	Purpose of Use	Basis
96-13411	Pend Oreille River	Domestic	Claim
96-8275	Ground Water	Domestic, Irrigation	License, Claim
96-9535	Ground Water	Municipal	License, Claim

Comments: The place of use ("POU") for permit no. 96-16697 ("this permit") overlaps with the POUs for licensed and claimed water uses which are listed in the table above.

License and Claim Nos. 96-8275 and 96-9535 authorize the diversion of ground water for uses that overlap with this permit. This permit authorized diversion from a new source, Pend Oreille River. The Department recognizes diverting water from a new source as a new beneficial use. The permit holders have also filed a claim (no. 96-13411) for Domestic use from the same source (Pend Oreille River). At licensing, the authorized use will have conditions for approval to limit the Domestic use by the quantity of water sufficient to cover claims that may be decreed for this overlapping place and nature of use. Additional conditions for approval will be added to limit the overlapping uses from other sources to prevent enlargement.

2. Other water rights with the same point(s) of diversion: ☒ Yes ☐ No

Water Right No.	Source	Purpose of Use	Basis
96-13411	Pend Oreille River	Domestic	Claim

Comments: I spoke with the permit holder over the phone who confirmed that this permit and Claim No. 96-13411 describe the use of the same point of diversion and diverting works. If the claim is decreed, there will be combined limits on the Domestic use to prevent enlargement.

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
Pend Oreille River	1		NE	NE	34	57N	03W	B.M.	BONNER

Method of Determination: GIS and photographs of the diverting works provided by the permit holders.

Change in POD? ☐ Yes ☒ No

Amendment Required? ☐ Yes ☒ No

2. **PLACE OF USE:** Use: IRRIGATION in parcel no. RP001690010060A, within Lot 6, Blk. 1, Gypsy Bay Subdivision.

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
57N	03W	34	0.3																0.3
		Lot #	1																
Total Acres =																			0.3

Method of Determination: GIS analysis of developed acres within parcel boundaries as identified by this permit.

Use: DOMESTIC in parcel no. RP001690010060A, within Lot 6, Blk. 1, Gypsy Bay Subdivision.

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
57N	03W	34	D																
		Lot #	1																

Method of Determination: GIS review of parcel boundaries as identified by this permit.

Change in POU? ☐ Yes ☒ No

Amendment Required? ☐ Yes ☒ No

3. Diversion System Information:

Description:

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

☒ Aerial Photo Attached (required)

☒ Photo of Diversion and System Attached

☒ Map clearly identifying POD and POU

3. Well or Diversion Identification No.*	Pump Make	Pump Model	Motor Model	Serial number	HP
POD	Goulds Water Technology	JPlus Jet Pump J10S	C48AA34A06	13722CH	1.0

*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
Not measured	NA	NA	NA	NA	NA	NA

2. Measurements: Because this permit qualifies for an in-office examination, no flow measurements were taken.

E. FLOW CALCULATIONS

No Additional Computation Sheets Attached

Measured Method: The permit holders stated that they have a 1.0 horsepower pump, which I used for calculations of a theoretical diversion rate (Q).

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

$$Q = \frac{8.8 * 0.7 * 1.0}{20 + 2.31 * 40}$$

$$Q = 0.05 \text{ cfs}$$

The following values in the theoretical equation are estimates and were not measured: Efficiency of pump (70%), depth to water (20 ft), and psi (40 a common pressure rating for domestic use). The theoretical calculations are based on multiple assumed

values, but the estimated diversion rate 0.05 cfs appears to be a reasonable rate for the diverting works as described by the permit holders.

A standard diversion rate for domestic use is 0.04 cfs (Idaho Code § 42-111). An acceptable diversion rate for irrigation of 5 acres or less is 0.03 cfs / acre (Administrator's Memorandum – Application Processing #17 – "Acceptable Rates of Irrigation for Small Acreages"). Based on typical diversion rates, an estimate of diversion rate (Q) that is based on the observed developed uses is:

$$Q = \text{Domestic Standard Rate} + \text{Irrigation Rate/acre} * \text{acres developed}$$

$$Q = 0.04 \text{ cfs} + 0.03 \text{ cfs/acre} * 0.3 \text{ acres}$$

$$Q = 0.04 \text{ cfs} + 0.01 \text{ cfs} = \mathbf{0.05 \text{ cfs}}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation, in Acre-Feet ("AF"): No calculations

Comments: Irrigation using natural stream flow diverted from a stream is exempt from the volume reporting requirement (Beneficial Use Examination Rules - IDAPA 37.03.02.035.01.i.viii).

2. Volume Calculations for Other Uses: Domestic use for one home = 0.6 AF per year.

Comments: For Domestic use where irrigation is separated, Administrator's Memorandum – Application Processing # 22 – "Definition of "Domestic" " recommends an annual diversion volume of 0.6 AF.

3. Total Volume:

$$V = \text{Volume for Irrigation} + \text{Volume for Domestic} = [\text{Exempt}] + 0.6 \text{ AF} = \mathbf{0.6 \text{ AF}}$$

G. PURPOSE OF USE

Domestic use for 1 home and the Irrigation of 0.3 acres.

Change in Purpose of Use? ☐ Yes ☒ No

Method of Determination: Description of developed use in Statement of Completion, and GIS analysis of developed acres of irrigation.

H. NARRATIVE/REMARKS/COMMENTS

The permit holders submitted the Statement of Completion for Submitting Proof of Beneficial Use ("Statement of Completion") on May 30, 2024. Because this permit authorizes a diversion rate less than 0.24 cubic feet per second ("cfs") and the irrigation of less than 5 acres, Permit No. 96-16697 ("this permit") can be licensed through an in-office examination of beneficial use according to the Beneficial Use Examination Rules (IDAPA 37.03.02.035.01.r).

The permit holders filed an adjudication claim (no. 96-13411) for DOMESTIC use on October 20, 2022, which was prior to the Application for Permit for this permit. I spoke with one of the permit holders (Mr. Roger Brincken) on August 21, 2024 to clarify the described uses of the claim and permit. Based on my conversation with the permit holder, this permit was filed as a back-up to the adjudication claim for water for domestic use from the Pend Oreille River and to acquire irrigation use. Claim no. 96-13411 is awaiting review by IDWR staff, and recommendations to the adjudication court have not been determined. Mr. Brincken said that the uses described by this permit and Claim no. 96-13411 have the same point of diversion ("POD") and diverting works. Conditions will be added at the time of licensing to prevent enlargement of use.

License and Claim Nos. 96-8275 and 96-9535 have uses that overlap with the domestic and irrigation uses from this permit. Nos. 96-8275 and 96-9535 divert from ground water. Conditions will be added this permit at licensing to prevent enlargement of use.

The uses developed under this permit are domestic use for one (1) home, and the irrigation of 0.3 acres within Lot 6, Blk 1 of the Gypsy Bay subdivision. The boundary for the POU for domestic use was based on the parcel boundaries. The permit authorized up to 0.5 acres of irrigation, but I am recommending a reduction in the number of acres based on GIS analysis of satellite imagery of the permit holders' property. Parcel no. RP001690010060A has a total acreage of 0.5 acres. Accounting for the home and other non-irrigated portions of the property, the observed area of irrigation is 0.3 acres.

I am recommending a combined maximum diversion rate of 0.05 cfs for the developed uses. In my phone conversation with Mr. Brincken, he clarified that the installed pump on the diverting works is 1 horsepower. The permit holders incorrectly wrote "1/2 horsepower" on the Statement of Completion. Mr. Brincken later submitted photographs of the 1 HP pump which are attached to this report. Theoretical analysis of a 1 horsepower pump, and standard diversion rates for domestic use plus the standard acceptable rate for the irrigation of 0.3 acres both give an estimated total diversion rate of 0.5 cfs (see item E. "Flow Calculations" above).

I am recommending an annual diversion volume of 0.6 AF which is the recommended volume for domestic use excluding irrigation per Administrator's Memorandum – Application Processing # 22 – "Definition of "Domestic"". Diversion volumes are not required for irrigation using natural stream flow diverted from a stream (Beneficial Use Examination Rules - IDAPA 37.03.02.035.01.i.viii).

Conditions of approval

The permit holders provided a photograph of the installed fish screen on the intake pipeline. Condition #1 of the permit (029) will be removed at licensing.

All other conditions of the permit will be carried forward at the time of licensing. Condition no. 5 of the permit (X31) has rate and volume limits for irrigation of less than five (5) acres. This condition will be modified to match the acreage developed under the permit, with combined limits of a diversion rate of 0.01 cfs and a diversion volume of 0.9 acre-feet annually at the field headgate for all rights used for irrigation at this POU.

Condition 928 will be added to the license to avoid any redundancy of water rights, in recognition of Claim no. 96-13411 which may be decreed with an earlier priority date than this permit.

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>	<u>ACRES</u>
Irrigation	04/01 to 10/31	0.01 CFS		0.3 acres
Domestic	01/01 to 12/31	0.04 CFS	0.6 AF	
Totals		0.05 CFS	0.6 AF	0.3 acres

2. Recommended Amendments

___ Change POD as reflected above ___ Add POD as reflected above **X** None

___ Change POU as reflected above ___ Add POU as reflected above **X** None

Other:

J. AUTHENTICATION – David Betts, Water Resource Agent

Field Examiner's Name David Betts Date July 17, 2025

Reviewer PH Date 7/22/25

Field Exam Map

The map below displays the authorized point of diversion (yellow circle) and places of use. The domestic use boundary (orange) is based on Bonner County parcel boundaries. The observed developed irrigation lies within the parcel boundaries (yellow outline).



Satellite imagery from 2023

Bonner County GIS data of the permit holder's property. The parcel boundaries are in orange. I used the parcel boundaries as the recommended boundary for the DOMESTIC place of use. The green shape outlined in blue was used to review the developed IRRIGATION and boundaries of that place of use. The box in the upper right hand of the image displays a calculation of the number of irrigated acres (0.3 acres).



Satellite imagery from 2024

