

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 97-7567
Exam Date: 03/21/2025

1. Current Owner:
DAMON BRETTTHAUER PO BOX 284 COOLIN ID 83821-0284 AND/OR
NERISSA BRETTTHAUER PO BOX 284 COOLIN ID 83821-0284
2. Accompanied by: Damon Brettthauer
Phone No: 208-610-3718
Address: Same as above
Relationship to permit Holder: Permit Holder

3. SOURCE:
GROUND WATER

Method of Determination: ArcMap, DRG, Well Driller Report.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap
2. Other water rights with the same point-of-diversion: NO Overlap

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
GROUND WATER SW¼ NE¼, Sec. 22, Twp 59N, Rge 04W, B.M. BONNER County

Method of Determination: GPS; ground water well D0072369 is located at -116°50.336, 48°27.152

PLACE OF USE: DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
59N	04W	22			X					X									

Method of Determination: Beneficial use field examination, Bonner County tax parcel maps, and ArcMap aerial imagery.

3.
 - X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
 - X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
 - X Aerial Photo Attached (required for irrigation of 10+ acres).
 - X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0072369	PENTAIR – FLOWTEC	1	PART NO. FP2170812-P2 S/N: 033L17R	UNKOWN	UNKOWN

D. FLOW MEASUREMENTS

1.

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

2. Measurements: I was unable to perform flow measurements due to inadequate pipe requirements. I used a theoretical pump equation to calculate the diversion rate during licensing review which resulted in a flow rate of 9.9 gpm or 0.02 cfs considering Department rounding standards.

E. FLOW CALCULATIONS

 X Additional Computation Sheets Attached

Measured Method: Theoretic pump equation derived a diversion rate of 0.02 cfs based on pump hung at depth of 215 ft, 1 hp pump motor, and 45 PSI operating pressure.

- Permit authorized 0.10 cfs diversion rate for domestic use 3 homes.
- Beneficial use exam Theoretic pump equation derived a diversion rate of 0.02 cfs.
- I've recommended **0.02 cfs** (9 gpm) for licensing purposes based on the Theoretic pump equation, which demonstrates a similar discharge/yield as documented on well driller report for D0072369 which equaled 6 gpm.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses: Domestic use annual volume = 3 homes (with ½ ac irrigation included) x 1.2 af = 3.6 af. **3.6 af** is recommended as the Maximum Diversion Rate for licensing purposes.

G. NARRATIVE/REMARKS/COMMENTS

I conducted a beneficial use field exam on 3/21/2025 with the Permit Holder, Damon Bretthauer (Applicant), which showed a cased ground water well source serving three homes for domestic purposes. At the POD, well with D-Tag D0072369 is located within a wood utility structure within an in-floor insert cabinet. Due to the size and semi-vaulted cabinet I was unable to collect a photograph of the well tag, but the well driller report annotates the Applicant as the owner at time of well construction in 2017 and the Applicant is still the current owner of the property the well resides on.

I calculated a Theoretic Pump Equation to evaluate a diversion rate of **0.02 cfs** which is recommended for licensing the domestic beneficial use. This rate is less than the Department standard diversion rate for three homes, but the Applicant is limited by the 1 hp pump motor installed on the diverting works for the shared well water system.

Department State Office staff attempted to conduct an in-office exam toward licensing this Permit but were unable to validate where the three homes designated on the Statement of Complete were located at. The southern parcel has several portable dry cabins that are constructed on site temporarily and then moved to other locations for use which confuses the aerial imagery. For this reason, I conducted a physical site visit to evaluate the water system prior to making licensing recommendations.

The domestic POU was walked with the Applicant during the field exam, and I collected photographs to illustrate the beneficial use per parcel. The Permit authorized the development of four homes on as many parcels but the two northern parcels of the POU have single ownership and only a single home was developed along with a shop. From the ground water well buried ¾" poly pipe routes to each of three homes for in-home water use, and frost-free hydrants are connected on the exterior for hose and portable sprinkler use for small landscape/lawn watering. During the exam I used field maps to sketch the domestic POU, and during licensing review I used ArcMap aerial imagery to assign the Domestic POU. The annual volume recommended for domestic use equals **3.6 af**, of which the 0.02 cfs ground water well source capacity is sufficient to provide.

I removed condition 26A and 046 from the Permit during licensing review based on Applicant's compliance. I revised condition X04 to reduce the domestic use from 4 homes to reflect 3 homes as developed. I replaced condition 187 with a text condition that changes the last word of the Permitted condition; the text condition limits ½ acre irrigation under this domestic use per home versus per lot. I made this change based on the two northern parcels only having one home developed. The Applicant asserted the owner of both parcels is working to complete a lot-line adjustment through the county to make it one single parcel vice two separate lots. I've added conditions X59 and X60 which are description based describing the POD lot designation and POU lot(s) designation. All other conditions on the Permit are being carried forward to the license. There are no overlapping water right concerns toward licensing Permit 97-7567.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
DOMESTIC	01/01 to 12/31	0.02 CFS	3.6 AF
<u>Totals:</u>		0.02 CFS	3.6 AF

2. Recommended Amendments

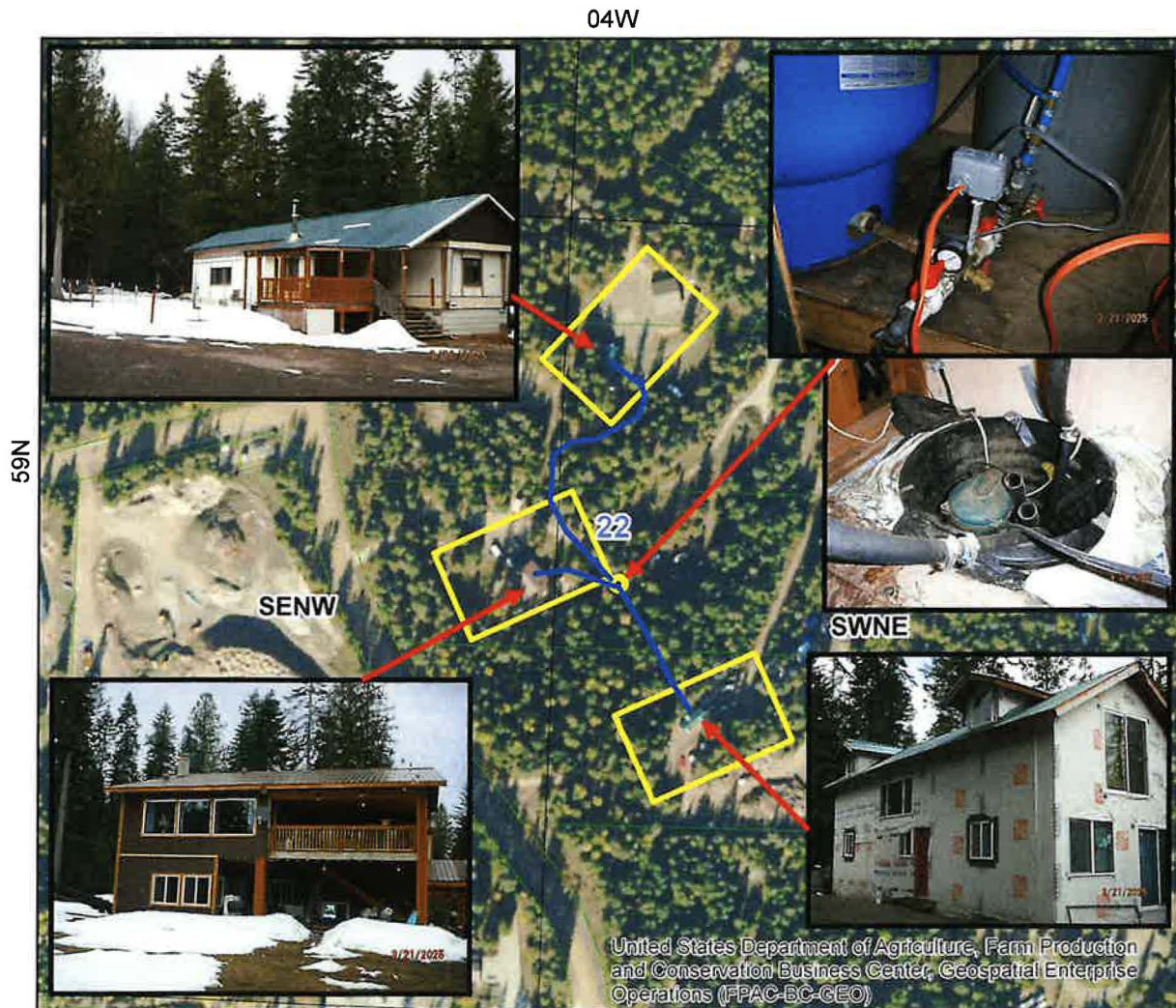
 Change P.D. as reflected above Add P.D. as reflected above X None
 Change P.U. as reflected above Add P.U. as reflected above X None

I. AUTHENTICATION Luke Bates – Sr Water Resource Agent

Field Examiner's Name LSB Date 3/26/2025
 Reviewer Chen Bu Date 5/9/2025

State of Idaho
Department of Water Resources
Attachment to Field Exam
97-7567

This map depicts the DOMESTIC system diagram.



0 0.035 0.07 0.14 Miles

- Place Of Use Boundary
- Point of Diversion
- Taxlots
- Townships
- PLS Sections
- Quarter Quarters



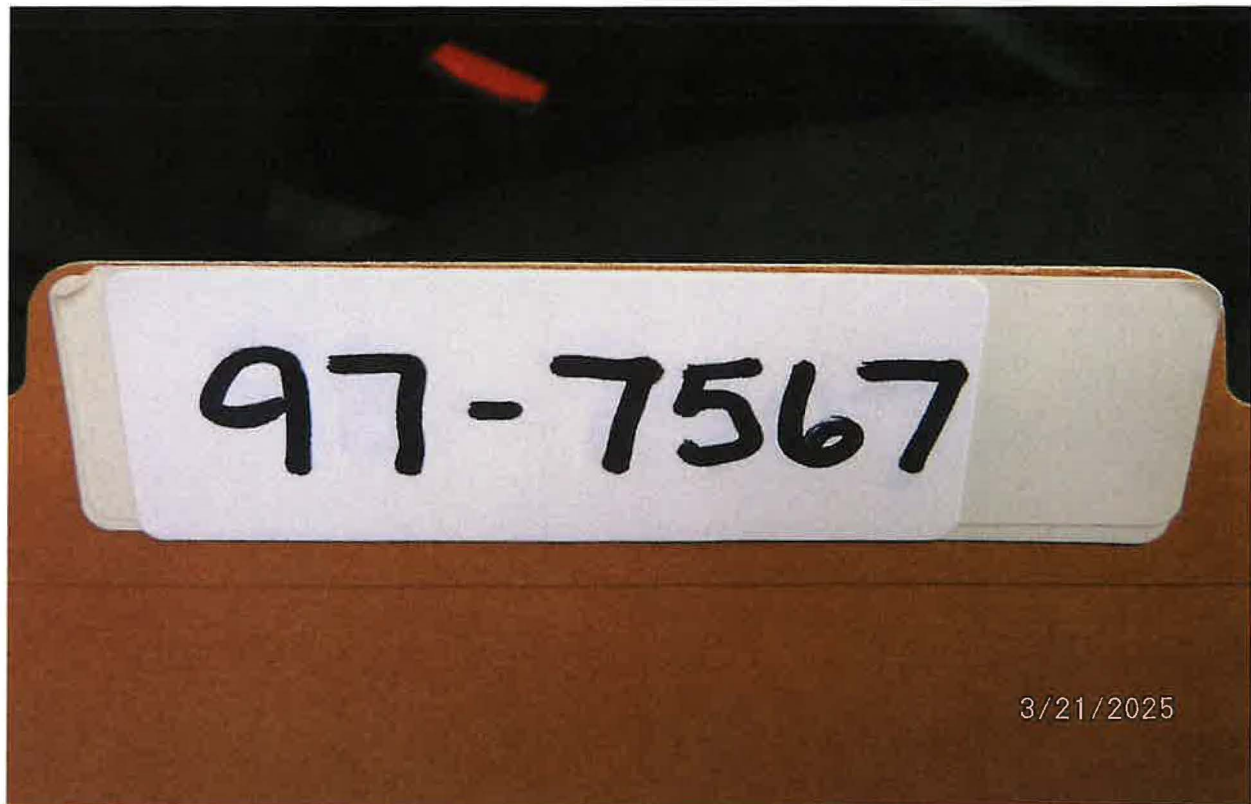
THEORETICAL PUMPING EQUATION(S) FOR WR# 97-7567

Theoretical Pumping Equation is required because system did not allow for a proper measurement. Pump is estimated to lift 215 ft, and running at 45 psi.

PUMP EQUATION

WATER RIGHT No. 97-7567

		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	1	319.0816	0.8	215	45
Q =		0.022 cfs 9.9 gpm				



BENEFICIAL USE FIELD EXAM DATE 3/21/2025



POD – GROUND WATER WELL D0072369 – LOCATED WITHIN UTILITY ROOM
STRUCTURE ON LOT 3, BLK 3; BOUNDARY ESTATES SUBDIVISION.



3/21/2025

DIVERTING WORKS – 1 HP PUMP CONTROLLER PART NO. FP217-812-P2



3/21/2025

WATER CONVEYANCE SYSTEM – PUMP TO PRESSURE TANK TO BURIED POLY-PIPE MAIN SERVICE LINES TO THREE RESIDENCES & FROST-FREE HYDRANT(S)



DOMESTIC POU – LOT 4, BLK 3; BOUNDARY ESTATES SUBDIVISION



DOMESTIC POU – LOT 3, BLK 3; BOUNDARY ESTATES SUBDIVISION



DOMESTIC POU – LOTS 1 & 2, BLK 3; BOUNDARY ESTATES SUBDIVISION