

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

A. GENERAL INFORMATION

Permit No: 2-10644

Exam Date: 2/14/2025

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? X Y N
- Irrigation of 5 acres or less**
 - Storage of up to 14.6 AF for stockwater purposes only
 - Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less

2. Current Owner: Name: Rodney Folden
Owner of Record Correct? X Y N
Address of Record Correct? X Y N

3. Fees have been paid: X Y N Receipt No: W052207

4. SOURCE

Snake River

Method of Determination: ArcGIS, Proof of Beneficial Use

Change in Source: Y X N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use:

Water Right No.	Source	Purpose of Use	Basis
63-136	Boise River	Irrigation	Decreed
63-137B	Boise River	Irrigation	Decreed

Comments: The above listed water rights and eleven others belong to larger irrigation entities and cover a larger service area. These rights do not interfere with WR 2-10644 as this is the sole source of irrigation for the parcel outlined as the place of use.

2. Other water rights with the same point of diversion:

Water Right No.	Source	Purpose of Use	Basis
2-10643	Snake River	Irrigation	Permit

Comments: The point of diversion used for WR 2-10643 is a pump owned by the owner of WR 2-10644 to irrigate a 2.4-acre parcel like the adjacent parcel that is the place of use for this water right.

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
Snake River			SE	SW	11	03N	05W	B.M.	County

Method of Determination: ArcMap, Proof of Beneficial Use, System diagram provided by owner

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

2. **PLACE OF USE:** 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	
05N	01W	11												1.9					
		Lot # 2																	
05N	01W	11												0.3					
Total Acres =																			2.2

Method of Determination: ArcMap, Proof of Beneficial Use, System diagram provided by owner

Change in POU? ____Y __X__N Amendment Required? ____Y __X__N

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

 Aerial Photo Attached (required for irrigation of 10+ acres). X Photo of Diversion and System Attached

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Folden Pump	Munro	2	202719	LP200B	202719

*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. Measurements: No flow measurements were collected during this in-house examination. Review is consistent with IDAPA 37.03.02.035.01(r)

E. FLOW CALCULATIONS

Theoretical Calculations:

As per AP memo #17: $0.03 \text{ cfs} \times 2.2 \text{ acres} = 0.06 \text{ cfs}$ Theoretical analysis: $(8.8)(2\text{hp})(0.7)/[(5\text{ft lift}) + (65 \text{ psi} \times 2.31)] = 12.32 / 155.15 = 0.08 \text{ cfs}$ $(8.8)(2\text{hp})(0.7)/[(5\text{ft lift}) + (50 \text{ psi} \times 2.31)] = 12.32 / 120.5 = 0.10 \text{ cfs}$ **Measurement = 0.08 cfs****Permit allowed = 0.05 cfs****License recommend for 0.05 cfs.****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.2 \times 3.5 = 7.7 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = (0.05 \text{ cfs} \times 259 \text{ days}) \times 1.9835 = 25.7 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 7.7 \text{ AFA}$$

Irrigation from a natural stream flow is exempt from the volume reporting requirement as stated in IDAPA Beneficial Use Field Exam Rule 035.01.j.viii and will not be included on the license.

G. PURPOSE OF USEIrrigation ☒X___Y___N___ # Stock_N/A___ Domestic # of Homes_N/A___

Other: N/A

Change in Purpose of Use? ___Y___X___N___

Method of Determination: Proof of Beneficial Use, ArcGIS

H. NARRATIVE/REMARKS/COMMENTS

An in-house examination was conducted for WR 2-10644 on February 14th, 2025 with additional information provided by the owner, Rodney Folden, via phone call and email correspondence. A permit was issued on November 23, 2022 to appropriate 0.05cfs for irrigation of 2.4 acres from the Snake River from March 1st through November 15th annually. Proof of beneficial use was submitted to the department on September 23, 2024.

Water right 2-10644 place of use includes parcel R3373610900 where the entire parcel, totaling 2.4 acres, was permitted.

During the development period, an irrigation system was put in place to reach 2.2 acres. The point of diversion is a 2hp pump that is shared with WR 2-10643. Both 2-10643 and 2-10644 share an irrigation system, which is represented by a diagram in figure 1, provided by the owner. There are five zones within the place of use, using 15 rainbird 5000 sprinklers, totaling 75 sprinklers within the system. Item E shows a theoretical calculation which uses information provided by the permit holder to show that the pump is capable of outputting 0.10cfs, exceeding this individual permit but allowing both permits to be satisfied simultaneously if necessary. I recommend that the full permitted 0.05cfs is licensed, diversion rates as high as 0.03 cfs for irrigation of up to five acres are acceptable (AP Memo 17).

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	0.05 CFS	7.7 AF
	<u>Totals:</u>	0.05 CFS	7.7 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's Name Kate Englund Date 2/14/2025

Reviewer _____ Date _____

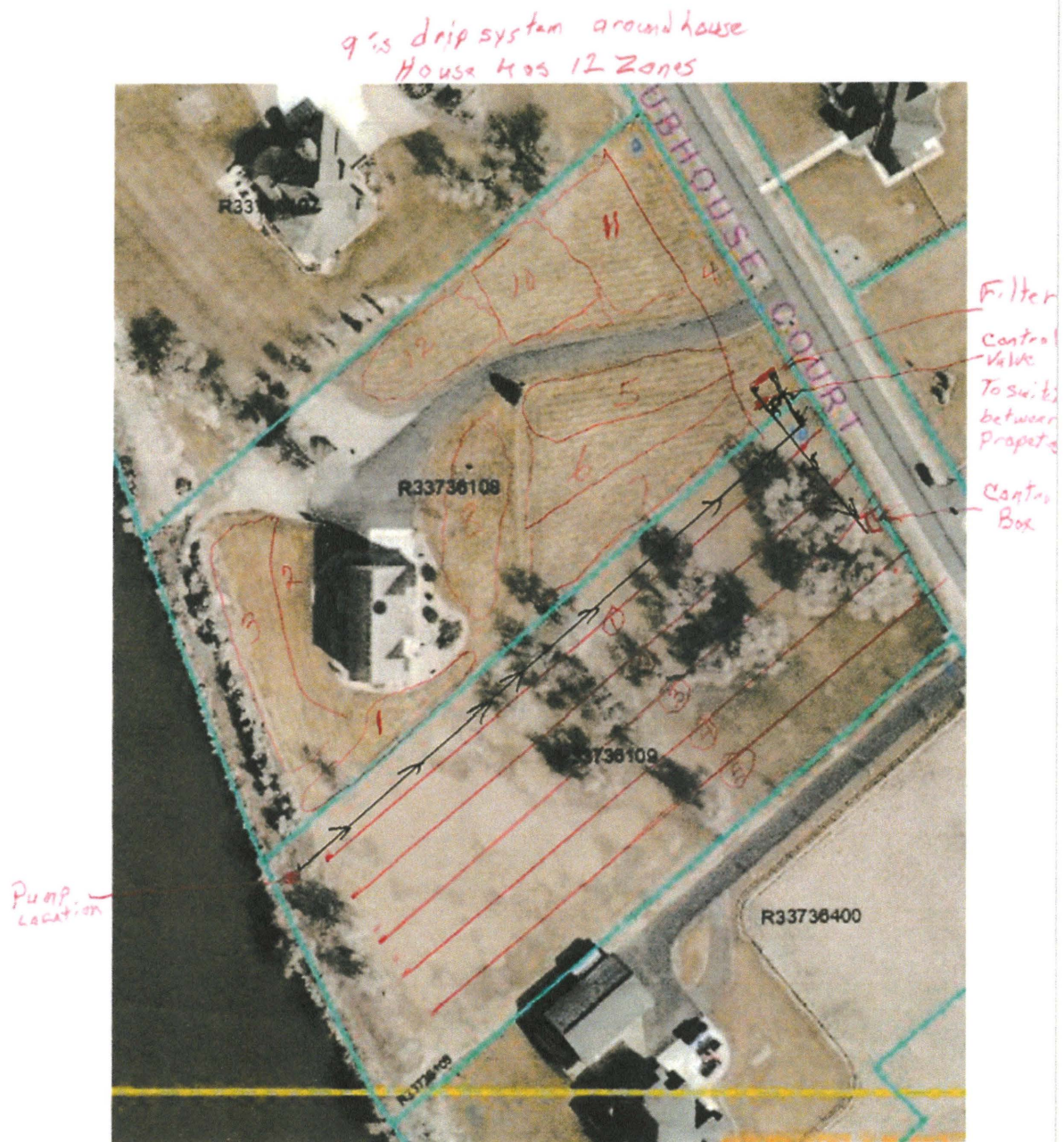


Figure 1 System diagram provided by the permit holder to represent the irrigation zones, pump location, and control box.



Figure 2 Photo of point of diversion, a 2hp Munro LP Series pump diverting water from the Snake River.



Figure 3 Photo of hose diverting water from the Snake River to the 2hp pump.



Figure 4 Photo of point of diversion, including buried pipe from river and 2hp pump.



Figure 5 Munroe LP Series serial number tag, showing the serial number 202719.

Brand	Munro
Product Type	Centrifugal Pumps
Discharge	1-1/2"
Suction	2 in.
Max Liquid Temperature	180° F
Discharge Pressure	21 - 50 PSI
Voltage	230V
Phase	1
Motor Voltage Connected	208/230V
Hertz	60
RPM	3450
Service Factor Amps 208V	13
Service Factor Amps 230V	12
Warranty	1 Year or 1000 Hours of Operation
Flow Rate	0 - 86 GPM
Horsepower	2

Figure 6 Specifications for Munro 2HP Centrifugal Pump LP200B, specifying the flow rate of 0-86 GPM.



Figure 7 Photo of irrigated area within place of use for 2-10644.

gas drip system around house
House has 12 Zones



Filter
Control Valve
To switch between properties
Control Box

Pump Location

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

03N

SESW

Lot 2 (SESW)

11

NENW

14

-
- A horizontal number line representing distance in miles. The line starts at 0 on the left and ends at 0.14 Miles on the right. There are major tick marks labeled 0, 0.035, 0.07, and 0.14 Miles. Between each of these major labels, there are four smaller, unlabeled tick marks, dividing each 0.035-mile segment into five equal parts of 0.007 miles each.



RE: In-House Exams 2-10643 and 2-10644

From: Englund, Kate (kate.englund@idwr.idaho.gov)

To: folden_r@yahoo.com

Date: Thursday, January 16, 2025 at 12:25 PM EST

Hey Rodney! I hope this email finds you well.

I do have a few questions that I'm hoping you can answer while I move forward with both licenses.

First (and forgive me if we spoke about this on the phone already), do you know the horsepower of the pump you are using and the approximate pressure that the system runs at?

2 HP

50-65 PSI

I see a lot of your neighbors have personal domestic wells. Is this the case for you as well, or do you use municipal water for the house?

No

Yes

The coordinates 43°36'12" N 116°54'19" W took me to a property three parcels downstream of yours, landing on the Heasley property. Is this correct? I assumed that this was the coordinates for the pump, but I also assumed that the pump was located between your two parcels. As of right now, I marked the location for your pump to be between the two parcels because I could see a slight trail leading from the house to that location on aerial imagery.

Yes

Yes

Primarily vacant lot

Lastly! I have attached an aerial image of both parcels, do you mind drawing a quick diagram of the delivery system? This can be extremely simple, including the pump location and an outline of the irrigation zones. If you have the pipe diameters for the irrigation zones, I would love that information as well.

Mostly 2" with some 1"

I apologize for the long windedness of the email and for tasking you with this. I am in no rush, so take your time and please reach out if you have any questions.



IDAHO DEPARTMENT OF
WATER RESOURCES

Kate Englund | Water Resource Agent

2735 W Airport Way, Boise, ID 83705-5082

(208) 605-4627 | www.idwr.idaho.gov

Englund, Kate

From: Rodney Folden <folden_r@yahoo.com>
Sent: Monday, January 6, 2025 12:15 PM
To: Englund, Kate
Subject: Pictures of the property to be serviced

CAUTION: This email originated outside the State of Idaho network. Verify links and attachments BEFORE you click or open, even if you recognize and/or trust the sender. Contact your agency service desk with any concerns.

Kate,

This picture is of a vacant lot that I have planted all in grass. It is watered with 5 zones with about 15 rainbird 5000 sprinklers (75 in all). The size of the lot is about 2.39 acres.

Englund, Kate

From: Rod Folden <folden_r@yahoo.com>
Sent: Monday, January 6, 2025 11:55 AM
To: Englund, Kate
Subject: Re: In-House Exams 2-10643 and 2-10644

CAUTION: This email originated outside the State of Idaho network. Verify links and attachments BEFORE you click or open, even if you recognize and/or trust the sender. Contact your agency service desk with any concerns.

Sorry again for the late response. I have a bunch of excuses, but I will not bore you.

I found my notes and I do have many pictures. I will send them to you in a few different messages, to insure that they all get there.

First the GPS location "obtained from my iPhone" is. 43o 36' 12" N 116o 54' 19" W it is at 2220 feet elevation.

More messages to follow.

Rod

[Sent from Yahoo Mail for iPhone](#)

On Friday, December 20, 2024, 12:07 PM, Englund, Kate <Kate.Englund@idwr.idaho.gov> wrote:

Hey again, Rodney!

Thank you for your time in speaking with me earlier. To process your water rights examinations in house, pictures of your pump and specifications tag regarding the serial number, horsepower, motor type, etc. will be a good start if not all I need to get you licensed! You said you're currently using the one pump to irrigate both lots, correct?

Best,

Englund, Kate

From: Englund, Kate
Sent: Friday, December 20, 2024 10:07 AM
To: folden_r@yahoo.com
Subject: In-House Exams 2-10643 and 2-10644

Hey again, Rodney!

Thank you for your time in speaking with me earlier. To process your water rights examinations in house, pictures of your pump and specifications tag regarding the serial number, horsepower, motor type, etc. will be a good start if not all I need to get you licensed! You said you're currently using the one pump to irrigate both lots, correct?

Best,

 IDAHO DEPARTMENT OF
WATER RESOURCES
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