

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17365
Exam Date: 08/28/2024

1. Current Owner:
VHALLER T HOHN 1302 15TH ST NW CALGARY AB T2N 26 AND/OR
DAVE TODD 1302 15TH ST NW CALGARY AB T2N 26
2. Accompanied by: In-office exam

3. **SOURCE:**
TWIN LAKES

Tributary
RATHDRUM CREEK

Method of Determination: ArcMap and DRG Layer.

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
numerous North Kootenai Water District	GROUNDWATER, COEUR D'ALENE LAKE, HAYDEN LAKE	MUNICIPAL	DECREED

Comments: The Permit's POU falls within the municipal service area for North Kootenai Water District which uses numerous groundwater sources, Lake Coeur D'Alene, & Hayden Lake to serve water. The Applicant's parcel is not served water for irrigation by the municipal provider and there is no concern for overlap between Permit 95-17365 and the municipal provider.

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

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

TWIN LAKES L5 (SW¼ NW¼), Sec. 5, Twp 52N, Rge 04W, B.M. KOOTENAI County

Method of Determination: ArcMap software; I used the Permit approval POD to designate the license POD centroid during licensing review. The diverting pump lies along the shoreline within the applicant's property boundaries, extending into the lake with a screened intake pipe.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
52N	04W	5							0.4										0.4

Total Acres: 0.4

Method of Determination: In-office exam conducted with email correspondence exchange to collect water system information from David Todd (Vhalleri Hohn's husband), one of the Permit Holder.

3.

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

☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

☒ Aerial Photo Attached (required for irrigation of 10+ acres).

☒ 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
CENTRIFUGAL PUMP W/LAKE INTAKE	RED LION	¾ OR 1	UNKOWN	RED LION	1-INCH DISCHARGE PIPELINE

D. FLOW MEASUREMENTS

1.

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

2. Measurements: No measurement required for an in-office exam.

E. FLOW CALCULATIONS

Flow measurement not required as per IDAPA RULE 37.03.02.035.01.r.iii.

F. DIVERSION RATES

The diversion rate for this irrigation right is limited to **0.03 CFS** or 13.5 GPM.

G. VOLUME CALCULATIONS

The annual volume for this irrigation right is limited to = 0.4 ac irrigation x 3.0 afa = **1.2 AF**.

If the pump operates 24/7 throughout the irrigation season of use it's capable of diverting = 0.03 cfs x 246 days x 1.9835 = 14.6 af.

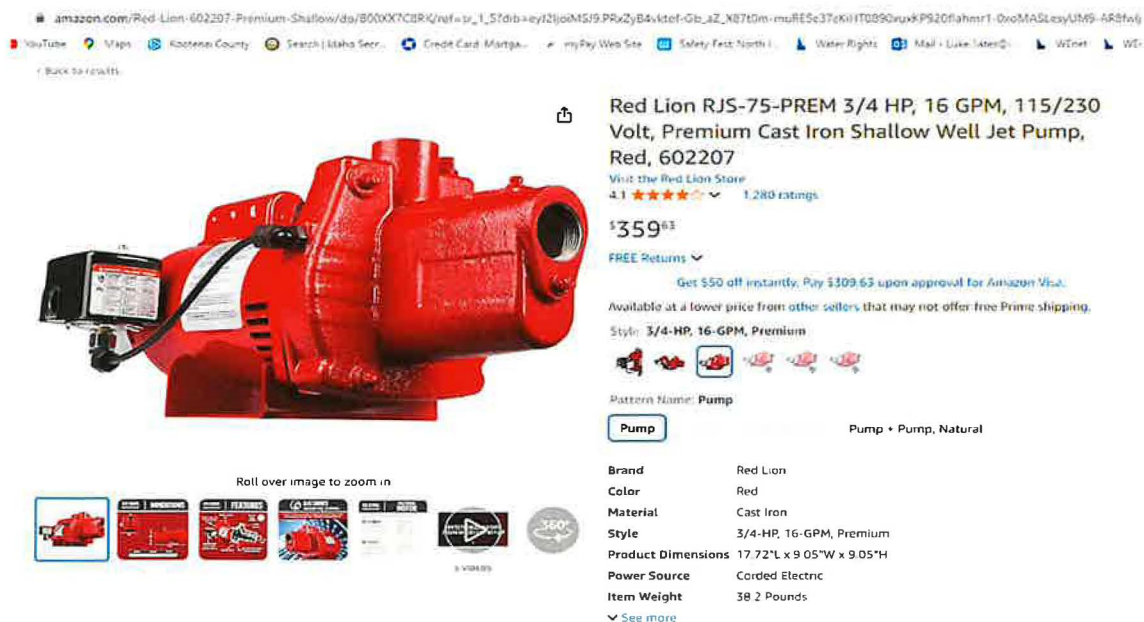
H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-house field examination. I used phone and email correspondence from the Permit Holder, received 8/16/2024, to gain information and photographs pertaining to lawn/landscape irrigation occurring at the POU. Kootenai County tax parcel data was reviewed which verifies ownership of parcel(s) RP069600010180, RP06960001019A, and RP06960001020A (Lots 18-20, Blk 1; St Jeor Lake Home Sites Subdivision) in the applicant's name as Vhalleri T Hohn; no change in ownership is recommended for licensing the water right using the current contact information which includes husband and wife.

Right 95-17365's irrigation water use from Twin Lakes is Administered by a Water Master and is within Water District 95C – Twin Lakes. The designated Water Master is authorized to notify and require compliance by the Right Holder regarding irrigation use from Twin Lake.

At the POD, the applicants have either a $\frac{3}{4}$ hp or 1 hp Red Lion centrifugal pump with screened intake positioned in the lake pumping to a small 4 nozzle & 1 hose-bib to hose & sprinkler system for lawn and landscape watering. The Statement of Completion illustrates the fish screen is installed as asserted by the Permit Holders, but condition X15 requiring the fish screen shall remain on the license to notify future water right holders of the screening requirements. Mr. David Todd supplied email correspondence with pump information, system design, and photographs which illustrate main system components & active irrigation from pop up rotary style sprinklers on irrigation riser pipes.

Red Lion centrifugal style pumps, or jet pumps, are commonly used for small irrigation systems and internet review identifies that in general $\frac{3}{4}$ hp pumps like the one illustrated below are rated at 16 gpm, which is adequate to provide for a diversion rate of 13.5 gpm or **0.03 cfs** as recommended for licensing purposes:



amazon.com/Red-Lion-602207-Premium-Shallow-Well-Jet-Pump/dp/B000X7C8R4/ref=sr_1_5?dib=eyJ2IjoiMS9PRvZyB4vktet-Gb_aZ_N87dOm-muRESc37eKilTT0890xuxKPS2Ofahmr1-0xoMASLey/UM9-AR8fajj

YouTube Maps Kootenai County Search Idaho Sec... Credit Card Manag... myPay Web Site Safety First North Water Rights Mail Like Later Winet Win

Back to results

Red Lion RJS-75-PREM 3/4 HP, 16 GPM, 115/230 Volt, Premium Cast Iron Shallow Well Jet Pump, Red, 602207

Visit the Red Lion Store

4.1 ★★★★★ 1,280 ratings

\$359.63

FREE Returns

Get \$50 off instantly. Pay \$309.63 upon approval for Amazon Visa.

Available at a lower price from other sellers that may not offer free Prime shipping.

Style: 3/4-HP, 16-GPM, Premium

Pattern Name: Pump

Pump • Pump, Natural

Brand Red Lion

Color Red

Material Cast Iron

Style 3/4-HP, 16-GPM, Premium

Product Dimensions 17.72"L x 9.05"W x 9.05"H

Power Source Corded Electric

Item Weight 38.2 Pounds

See more

Roll over image to zoom in

3 VIDEOS

Information retrieved from www.amazon.com on 11/15/2024

In Mr. David Todd's email correspondence, David acknowledges the pump to be $\frac{3}{4}$ or 1 HP, but he wasn't sure as he'd sprayed over the data plate in the past. Regardless, either pump HP rating is sufficient to divert up to 0.03 cfs depending on the total head requirements for irrigation occurring at the small lot(s) irrigation POU.

During licensing review, I used ArcMap aerial imagery to trace out the irrigation POU. The POU shape excludes structures and primary residence(s) for the three lot POU and equals 0.4 acres. This acreage is slightly reduced from the 0.5 acres authorized for development. The water system incorporates rainbird style rotary pressurized sprinklers to irrigate small lawn areas around the home(s) and landscape watering to keep vegetation actively growing throughout the irrigation season of use. The annual volume and maximum volume recommended for licensing purposes equals 0.4 ac x 3.0 afa = **1.2 af**.

I removed condition 26A from the Permit during licensing review. I replaced condition R66 with X31, which better describes the small acreage irrigation diversion rate & diversion volume for licensing purposes. I revised condition X60 to better describe the POU occurring within a named subdivision. All other conditions on the Permit are being carried forward to licensing. There are no overlapping water right concerns toward licensing Permit 95-17365.

Have conditions of permit approval been met? ☒ 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>
IRRIGATION	03/15 to 11/15	0.03 CFS	1.2 AF
<u>Totals:</u>		0.03 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

I. AUTHENTICATION

Luke Bates – Sr Water Resource Agent

Field Examiner's Name

[Signature]

Date

11/5/2024

Reviewer

[Signature]

Date

3/28/2025

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17365

This map depicts the IRRIGATION system diagram.

04W



0 0.02 0.04 0.08 Miles

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



Bates, Luke

From: David Todd <david.todd@aspenleafenergy.com>
Sent: Friday, August 16, 2024 11:13 AM
To: Bates, Luke
Subject: Re: [EXTERNAL] IDWR water permit 95-17365

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.

We have a 1 HP (might be 3/4) red lion pump. I painted over the spec plate. The yard is steep and irrigation zones are between 20 and 30 feet above the lake. The pump discharge necks down to 1 inch and irrigation heads are black plastic. There are 4 heads. I also have a spigot outlet 30 feet in elevation above the lake level. I use that spigot with garden hose to water areas that don't get adequate coverage from my sprinklers. Pictures show the pump and its discharge, the yard, sprinklers in action and the hose spigot.... Hope this helps. I know the pump curves show higher potential capacity than my permit, but in reality with elevation and distribution losses, I'm quite sure we're below license levels. Thanks, Dave
Sent from my iPhone

On Aug 14, 2024, at 10:26 AM, Bates, Luke <Luke.Bates@idwr.idaho.gov> wrote:

You don't often get email from luke.bates@idwr.idaho.gov. [Learn why this is important](#)

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr. David Todd,

Thank you for speaking with me today regarding your water permit 95-17365 associated with Twin Lakes diversion for irrigation purposes. Regarding the field exam requirements, I believe we can pursue an in-office exam working to collect the following information from you:

1. Photo of Red Lion centrifugal pump data plate – this should illustrate the HP of the pump.
2. Discharge port size – often this is anywhere from ½” up to 2” for these smaller irrigation applications.
3. Approximate elevation changes for irrigation system considering the intake pipe drafts from at least 10 ft depth in lake distributing up-hill a certain elevation to sprinklers.
4. Type of sprinklers used by zone – are they brass impact or the pressurized rotary style black spray nozzle sprinklers?
5. A couple photographs of the irrigation area and at least one with active irrigation taking place from one of the sprinklers.

Once I gain this information, I'll be able to finalize the Permit for licensing purposes. Please do reach out with any questions related to the field exam process and/or water right inquiries.

V/r,

Luke Bates

Sr. Water Resource Agent

Northern Region

P: 208-762-2817

<image001.jpg>

7600 N. Mineral Dr., Suite 100
Coeur D'Alene, ID 83815-7763

95-17365

LICENSE REVIEW

**PHOTOGRAPHS SUBMITTED BY DAVID TODD VIA EMAIL CORRESPONDENCE ON
8/19/2024**



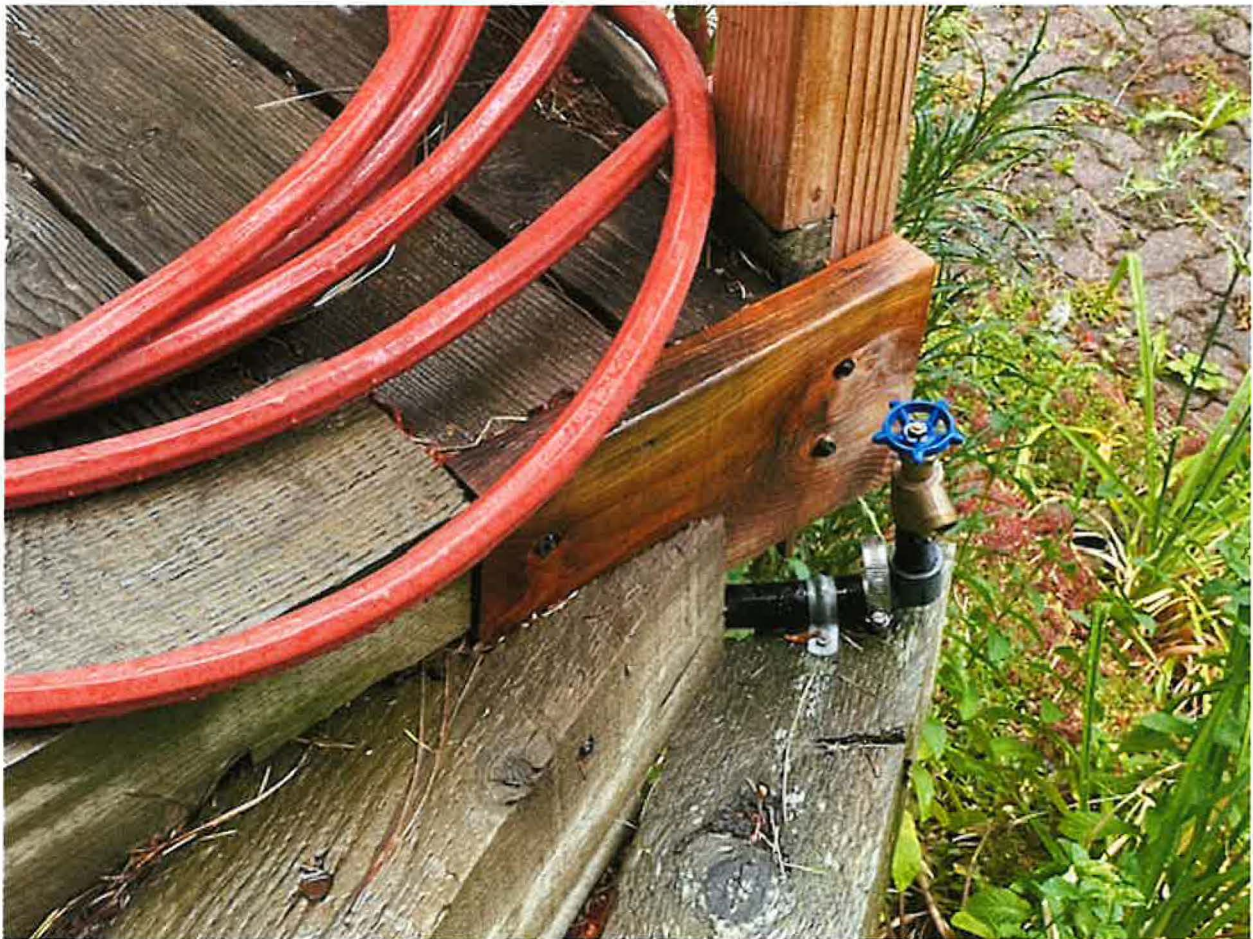
POD – ¾ HP – 1 HP RED LION CENTRIFUGAL PUMP



DISCHARGE PIPE REDUCED DOWN TO 1-INCH POLY PIPE



POU – MAIN IRRIGATION PIPELINE TO 4EA LATERALS & HOSE/SPRINKER
IRRIGATION





IRRIGATION POU