

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

A. GENERAL INFORMATIONExam Date: 08/23/20241. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? X Y ___ N

- a. X Irrigation of 5 acres or less
b. ___ Storage of up to 14.6 AF for stockwater purposes only
c. ___ Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
d. ___ Other < >

2. Current Owner: **JEFFEREY FAUTT**

Owner of Record Correct? ___ N

Address of Record Correct? ___ N

If No Explain:

3. Beneficial Use Fees have been paid: X Y ___ N Receipt No: C118469

4. Source: Tributary:

COEUR D ALENE LAKE**SPOKANE RIVER**

Method of Determination: Tax lot Data, GIS, and Well Drillers Report

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
NONE	NA	NA	NA

Comments: No irrigation rights overlap the permit place of use (POU).

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

Water Right No.	Source	Purpose of Use	Basis
NONE	NA	NA	NA

Comments: The permit point of diversion (POD) for is not shared with any rights.**C. DIVERSION AND DELIVERY SYSTEM**

1. Location of Point(s) of Diversion:

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Lake Coeur D' Alene			SE	SE	10	40N	04W	B.M.	Kootenai

Method of Determination: GIS and Kootenai County tax lot data.Change in POD? ___ Y X N Amendment Required? ___ Y X N2. Place of 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	
48N	04W	10																0.2	
48N	04W	11											0.1						
48N	04W	14						0.3 L2											
Total Acres =																			0.6

Method of Determination: Kootenai County Maps, GIS, and Tax Parcel DataChange in POU? ___ Y X N Amendment Required? ___ Y X NX 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

3. Diversion Id No.*	Motor Make	HP	Pump Model	Pump Make	Pump Serial No. or Discharge Size
Screened Lake Intake	Unknown	3	25BT3S4-PE	Franklin	95922513 (25 GPM)

*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
None	NA	NA	NA	NA	NA	NA

2. Measurement Comments: The system uses a Franklin 3 Hp (25 GPM) pump with a VFD controller. A total of 125ft maximum lift was estimated based on the DRG map. No measurement is required for an in-house exam, but a theoretical calculation and Administrative Memo #17 were used to determine a reasonable diversion rate.

E. FLOW CALCULATIONS

___ Additional Computation Sheets Attached

Measured Method:

$$Q = (3.0 \text{ Hp})(8.8)(.80 \text{ efficiency}) / (125 \text{ lift in ft}) + (2.31)(45 \text{ psi}) = 0.09\text{cfs}$$

Pump Specs. Provided: 25GPM/448.83 GPM per CFS = 0.06cfs

BU Rate Calculation:

$$0.14\text{cfs} / 2.5\text{acres} = 0.056\text{cfs/acre} \times 0.6 \text{ acres} = 0.03\text{cfs}$$

Theoretical Calculation= 0.09cfs

Permit allowed = 0.14cfs

BU limited rate= 0.03cfs

Recommendation= 0.03cfs

Comments: According to the protest conditions and the permit documentation the total rate of 0.14cfs for the irrigation of 2.5 acres, or approximately 0.06cfs per acre not to exceed the headgate standard volume per acre daily. The system diagram submitted by the permit holder outlining the irrigated areas (outlined in blue in figure 2) identified approximately 0.6 acres of irrigation occurring within the parcel appurtenant to the permit POU. I recommend the license be issued for a total diversion rate of 0.03cfs, based on the gallons per day per acre determined by the resolution of the protest and the Department permitted rate per acre.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{0.6\text{-acre} \times 3.0 = 1.8 \text{ AF}}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \underline{0.03\text{cfs} \times 246 \text{ days} \times 1.9835 = 14.6 \text{ AF}}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \underline{1.8 \text{ AF}}$$

Daily Volume as per Field headgate Standard:

$$3.0 \text{ afa} \times 2.5 \text{ acres} = 7.5\text{afa} \times 325,850 \text{ Gal/af} = 2,443,875 \text{ Gal} / 246 \text{ days per irr season} = \underline{9,934.5 \text{ GPD}}$$

Permit Conditioned Daily Volume:

$$\underline{32,316 \text{ GPD}} \text{ for the irrigation of } \underline{2.5 \text{ acres}} = \underline{12,926.4 \text{ GPD/Acre}}$$

$$12,926.4 \text{ GPD/Acre} \times 0.6\text{acre} = \underline{7,756 \text{ GPD}}$$

2. Volume Calculations for Other Uses: NA

Comments: The preceding headgate calculation determined that 1.8 AF annually is a reasonable volume for 0.6 acres of irrigation. I recommend the license be issued with an annual volume of 1.8 AF and conditioned limiting daily used to 7,756 GPD, as per the conditional agreement in resolution of the protest to the application for permit.

G. PURPOSE OF USE

Irrigation X Y N # Stock Domestic # of Homes

Change in Purpose of Use? Y X N

H. NARRATIVE/REMARKS/COMMENTS

This permit for the irrigation of 2 ½ acres qualifies for an in-office examination. I called the permit holder on July 31, 2024, and requested that he send a system diagram including the area(s) of irrigation and description of the system with photos. On August 19, 2024, the permit holder emailed photos of system (Figures 4 & 5), and a map of the irrigated areas within the permit POU (Figures 1 & 2). GIS imagery supports the irrigated areas outlined in the system diagram submitted by the permit holder. A GIS measurement of the combined areas was approximately 0.6 acres(see figure 6). I emailed and called the applicant explaining via messages the assessment. I requested that he identify any areas of irrigation not included in the assessment. No clarification or additional information was received from the permit holder. On September 18, 2024, the permit holder responded confirming that the assessment of the irrigated area is accurate.

The Department previously accepted the permit holder's justification for a rate higher than standard and the permit was conditioned to limit the gallons per day making the use in compliance with the headgate standard volume for the place of use and the conditional resolution of the protest to the application submitted by the Kootenai Environmental Alliance. I recommend the license be issued with a rate of 0.03cfs, an annual volume of 1.8 AF for the irrigation of 0.6-acre, and conditions X15, 020, X31, and 004. Condition 26A should be removed at licensing as per current guidance. Condition 62 should be replaced with X31 at licensing as the total irrigated area is less than 1 acre.

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	03/15 to 11/15	0.03cfs	1.8 AF
	<u>Totals:</u>	0.03cfs	1.8 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

Other: < >

J. AUTHENTICATION- Water Resource Agent- Bob Howe

Field Examiner's  Date 9/18/2024

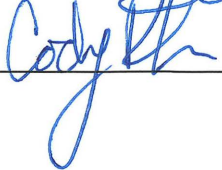
Reviewer  Date 9/20/24



Figure 1- Kootenai County GIS image of the POU, submitted by permit holder with irrigation coverage areas outlined in blue, the yellow outlined area is proposed future irrigation (areas outlined and described by the landscaping company).

Fault Residence- Irrigation Layout 903 E Pugh Point, Harrison, ID 83833

Valve box with (1) 1" valve, 1" poly pipe with 7-8 rotor sprinklers for lawn coverage and (1) 1" valve for future drip use

Pump station, above ground skid pulling water from lake with 1.5" poly pipe, foot valve, and filter in lake; pump station has check valve and automatic filtration system, VFD pump controller. Pump is a Franklin 25BT3S4-PE #95922513 25GPM Multi-Stage Booster Pump, 3 HP, matched to a VFD; outlet piping is 2" stainless steel, 2" high pressure poly, and then 2" schedule 40 PVC for a short while before turning into 1.5" PVC mainline.



Valve box with (1) 1" drip valve for garden beds and front entrance landscaping, all drip on 1" poly mainline with 1/2" poly runs, and .5-2 gph emitters per plant, (1) other 1" drip valve feeding large spruce trees with 1" poly pipe and emitters and tree bubblers

Valve box with (1) 1" valve feeding trees to the east with 1" poly and tree bubblers, and (1) other 1" valve feeding drip to trees on lakeside of home with 1" poly and 2 gph emitters

**Blue lines represent mainline, 1.5" schedule 40 PVC from pump station up towards home, tee'd off in select areas to feed valve boxes, lateral mainlines look to be 1.25-1.5" sched 40 PVC as well. Red lines represent valve laterals and to what general area they provide irrigation, all .5-1" poly pipe.

Figure 2- System Diagram provided by permit holder.

1. Your pump station has an IFM (manufacturer) flow sensor, with a digital readout on the sensor and wired to your pump computer to also track accumulated gallons per year/to date. Pics attached to show sensor location, close up of sensor, and controller panel readout with YTD gallons used; please note we did recently reset that flow total when we installed those last components and reset some parameters in the computer for the filtration system (side note: Jake's visit today showed no faults to the system/filter, and everything operating normally!). See attached irr pic A, B, C, D, E
2. Jpeg attached, 'site map with irrigated areas' showing irrigated areas; blue zones show existing rotor and drip coverage, yellow area shows future landscaping likely covered by drip. Of course the system has ample mainline size, pump capacity, and stubouts to irrigate much more space.
3. Attached pdf 'Fauett site map irrigation layout' should clearly show irrigation system layout, pump location and info, mainline info and layout, and general valve location and coverage areas.

Figure 3- System details provided by permit holder in body of email with diagram attached (system details were provided by the permit holder's landscaper)

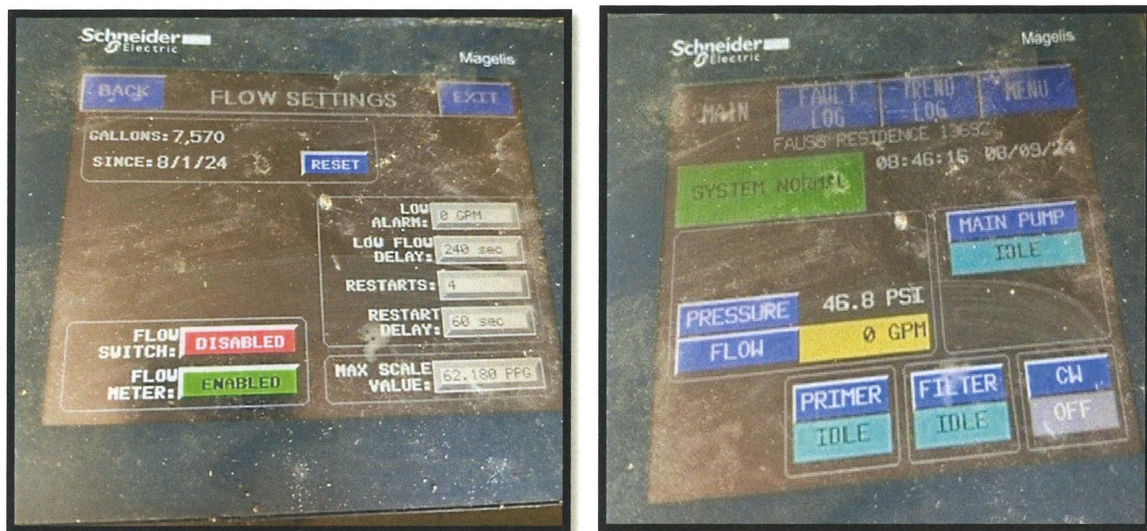


Figure 4- Irrigation Photos D & E submitted by the permit holder, showing the control panel for the measuring device installed.



Figure 5 -Irrigation Photo C of the pump with VFD controller submitted by the permit holder.



Figure 6– GIS NAIP 2023 Imagery- Permit POU outlined in blue, and POD is indicated by the blue point.

Howe, Bob

From: Shelby Fautt <shelbyfautt@gmail.com>
Sent: Wednesday, September 18, 2024 4:36 PM
To: Howe, Bob
Subject: Re: Assessment Complete for In office Examination- Permit 95-17320

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.

Yes we do

Shelby

On Sep 18, 2024, at 2:57 PM, Howe, Bob <Bob.Howe@idwr.idaho.gov> wrote:

Hi Shelby,

I was waiting for a response to the preceding email to confirm that the assessment is accurate. Do you agree with the assessment? Thank you for your response.

<image009.jpg>

From: Shelby Fautt <shelbyfautt@gmail.com>
Sent: Wednesday, September 18, 2024 11:17 AM
To: Howe, Bob <Bob.Howe@idwr.idaho.gov>; Jefferey Fautt <Jeffereyfautt@gmail.com>
Subject: Re: Assessment Complete for In office Examination- Permit 95-17320

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.

Has this been fully approved and finalized? Thanks

On Fri, Aug 23, 2024 at 8:12 AM Howe, Bob <Bob.Howe@idwr.idaho.gov> wrote:

Good Morning Shelby,

I have completed my in-office review of the system diagram and information you have provided. The combined GIS measured areas of irrigation (see attached image) is approximately 0.6-acre. I will be submitting the review into my supervisor's signature queue today. If you feel any areas of irrigation were not represented in the place of use previously outlined, please provide any corrections on an image and email them to me at your earliest convenience for consideration. Please feel free to reach out to me with any questions or concerns.

<image002.jpg>

From: Shelby Fautt <shelbyfautt@gmail.com>

Sent: Monday, August 19, 2024 1:54 PM

To: Howe, Bob <Bob.Howe@idwr.idaho.gov>; Jefferey Fautt <Jeffereyfautt@gmail.com>

Subject: Fwd: Additional Information Requested- Permit 95-17320

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.

Hello, we had our landscaper get all the info and maps for you. We may take the tree area next to the neighbors house and the tree area up close to the highway off irrigation for good at the end of the season. They are pretty established but need to take a better look at them in the next month or so. Let us know if you have any questions.

Thanks

Shelby Fautt

----- Forwarded message -----

From: Gabe White <gwhite@rootsup-phc.com>

Date: Fri, Aug 9, 2024 at 3:30 PM

Subject: RE: Additional Information Requested- Permit 95-17320

To: Shelby Fautt <shelbyfautt@gmail.com>

Cc: Jefferey Fautt <Jeffereyfautt@gmail.com>

Hi Shelby,

1. Your pump station has an IFM (manufacturer) flow sensor, with a digital readout on the sensor and wired to your pump computer to also track accumulated gallons per year/to date. Pics attached to show sensor location, close up of sensor, and controller panel readout with YTD gallons used; please note we did recently reset that flow total when we installed those last components and reset some

parameters. The computer for the filtration system. (Side note: Jake's visit today showed no faults to the system/filter, and everything operating normally!). See attached irr pic A, B, C, D, E

2. Jpeg attached, 'site map with irrigated areas' showing irrigated areas; blue zones show existing rotor and drip coverage, yellow area shows future landscaping likely covered by drip. Of course the system has ample mainline size, pump capacity, and stubouts to irrigate much more space.
3. Attached pdf 'Fauett site map irrigation layout' should clearly show irrigation system layout, pump location and info, mainline info and layout, and general valve location and coverage areas.

Let me know if you guys need anything else! This took a little time for me to put together so you'll see this service on your next bill.

Thanks,

Gabe White, Owner

RootsUp Plant Health Care

PO Box 305

Post Falls, ID 83877

o: 208-967-0428

c: 518-378-4145

www.rootsup-phc.com

<image003.jpg>

<image004.jpg>

PN-8324A

ISA Certified Arborist

ISA Tree Risk Assessment Qualified

From: Shelby Fautt <shelbyfautt@gmail.com>
Sent: Wednesday, July 31, 2024 9:49 AM
To: Gabe White <gwhite@rootsup-phc.com>
Cc: Jefferey Fautt <Jeffereyfautt@gmail.com>
Subject: Fwd: Additional Information Requested- Permit 95-17320

Hello

I just texted you. I sent in all our paperwork to finish our landscaping permit. Jeff received a call yesterday from bob. Can you take a look below and see if you can help us out on all 3 items?

I wanted to let you know I did sent a check to pay for all of our invoices. It has not cleared on our end so your office still must be processing it.

Thanks

Shelby

Begin forwarded message:

From: "Howe, Bob" <Bob.Howe@idwr.idaho.gov>
Date: July 31, 2024 at 7:31:38 AM PDT
To: shelbyfautt@gmail.com
Subject: Additional Information Requested- Permit 95-17320

Dear Jeff Fautt,

Thank you for taking the time to discuss your permit with me yesterday afternoon. As I mentioned in our conversation the Department received the Proof of Beneficial Use you submitted for permit #95-17320. I am currently reviewing the permit eligibility for an in-office examination for licensing. In-office examination expedites the licensing process by using information and documentation submitted by the permit holder(s) and GIS aerial images to process the examination without the need for a field examination to be scheduled and conducted at a later time. The permit issued provided a scope for the development of future uses. The purpose of the examination is to record the details of the use that has been developed.

After reviewing your Proof of Beneficial Use, there are a few items in need of further information or clarification.

1. (1) On your permit condition # 5 requires **that The right holder shall install a measuring device that can be used to determine the instantaneous rate of flow of water through the system.** On Section #6 of your Statement of Completion you did not indicate that you have installed a measuring device. Is the measuring device installed at this time? If so, please confirm that it is and provide a photo of the measuring device and any make/model details.
1. It is difficult to discern the boundaries of the irrigated areas using the aerial imagery alone. On section #3 of the Statement of Completion you stated that the extent of the irrigation use developed is 2.5 acres. Please outline and label the irrigated areas on one of the images I have attached (or you may use one of your own) and return it to me for confirmation of the irrigated area(s)
1. Please provide a sketch of the system diagram from the point of diversion to delivery for the irrigation occurring. Making sure to identify the **boundary of the area(s) irrigated, sprinklers, water lines** (including dia. and type, for example ½" poly pipe), the **pump** (including the Hp, make and model). This can be drawn on one of the images I have attached to this email, or you may use your own. Then attach the diagram to an email with any additional information regarding the system and/or that would be helpful in describing the system diagram.

Feel free to reach out to me with any questions or concerns regarding the items requested. If I am unavailable any of my team members should be able to assist you, if you provide your permit # 95-17320. It is important that you **respond to this request within 14 days** by email and/or phone, in order to pursue this method to expedite your licensing process.

Thank you for your time and attention in this matter.

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