

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 71-10945

Exam Date: 9/14/2018

1. Current Owner:
RIVCO LLC PO BOX 640 SALMON ID 83467 (208) 756-3415

2. Accompanied by: Jim Bills
Phone No: (208) 761-9800
Address: PO Box 640 Salmon ID 83467
Relationship to Permit Holder: owner of RIVCO LLC

3. **SOURCE:**
GROUND WATER

TRIBUTARY:**B. OVERLAP REVIEW**

- Other water rights with the same place of use: The permit identified a condition limiting the use of 71-10945 and water right 71-7124 (a 1.0 acre irrigation right out of Valley Creek) if used together on the same property. However, Mr. Bills indicated that it is his preference to utilize ground water for irrigation of the property rather than surface water so he submitted a Notice of Abandonment of Water Right for 71-7124 on 11/6/2018. Thus, there is no longer an overlapping right.
- Other water rights with the same point-of-diversion: none

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NW¼SE¼ Sec. 25, Twp 11N, Rge 12E, B.M. CUSTER County

Method of Determination: on-site inspection, gps location, aerial photography

2. 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	
11N	12E	25														2.4	2.1		4.5

Total Acres: 4.5

Method of Determination: on-site inspection, aerial imagery in ArcMap (2015 NAIP, 2016 ESRI, 2017 NAIP) & Google Earth (2014)

3. ATTACHMENTS

- ☒ 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. DIVERSION SPECIFICATIONS

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0064990	Grundfos	3			

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1. Measurement not required per IDAPA 37.03.02 Beneficial Use Exam Rules because the permit is for irrigation of less than 5 acres.
2. Measurements: N/A

E. FLOW CALCULATIONS

Measured Method: N/A

_____ Additional Computation Sheets Attached

The permit was issued with a diversion rate of 0.10 cfs. The field inspection identified 4.5 acres of irrigation. Per IDWR Application Processing Memo #17 and IDAPA 37.03.02 Beneficial Use Examination Rules, the Department can authorize rates of diversion up to 0.03 cfs/acre for irrigation of up to 5 acres. For 4.5 acres, this would equate to 0.135 cfs. Since this is larger than the permitted amount, I recommend licensing at the permitted rate of 0.10 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

The Irrigation Field Headgate Requirement for this area is 3 acre-feet/year/acre. The standard irrigation season is 5/1 – 10/31, which is equivalent to 184 days.

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.5 \times 3 = 13.5 \text{ ac-ft/yr}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.10 \times 184 \times 1.9835 = 36.5 \text{ ac-ft/yr}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \mathbf{13.5 \text{ ac-ft/yr}}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

Application for Permit 71-10945 was filed on June 11, 2012 by RIVCO LLC for the diversion of 0.1 cfs from ground water for irrigation of 4.8 acres. The permit was issued on January 23, 2013 with proof due by February 1, 2018. Proof of Beneficial Use was filed on February 1, 2018. On September 14, 2018, Corey Skinner and I met Mr. Jim Bills at the property to perform the field exam.

The point of diversion and place of use are located approximately 5 miles west of Stanley along Highway 21. The point of diversion is a 6 inch diameter well (D0064990) which was drilled for the purpose of this permit in October 2013 under drilling permit number 870123. Mr. Bills indicated that a Grundfos 3hp pump is installed in the well.

From the well, water is piped into an underground sprinkler system which is operated using an irrigation controller. Mr. Bills explained that the delivery system consists of 1 ¼" buried pipe set up in several zones, with 2 sprinkler heads per zone. The system uses Rainbird 8005 Series pop-up style sprinkler heads to irrigate the property, including the area immediately surrounding the house. (Note, a separate domestic well provides culinary water for the house.) Mr. Bills operated one zone of the system while we were there and we also walked the irrigated area. Mr. Bills explained that he has not seeded any specific crop or ground cover because he does not want to introduce any non-native species; rather, he has been working to remove the sagebrush and is letting the native grasses naturally reseed. The tax parcel is identified as 4.975 acres per the Custer County Assessor website and the Permit identified 4.8 acres that were proposed to be irrigated. During the field exam, I observed that a portion of the southeast corner of the property is not being irrigated. That area is a treed hillside that slopes down toward Valley Creek. Additionally, the permitted place of use included portions of the driveway which do not appear to be covered by the irrigation system. Using my observations from the on-site inspection as well as aerial photography available in ArcMap & Google Earth, I calculated the developed place of use to be 4.5 acres. Using this modification in acreage, I calculated the rate and volume to be licensed for this permit.

During the field exam, photos were collected of the point of diversion and place of use (see attachments). A direct measurement of the diversion rate was not taken because diversion rates less than 0.24 cfs are exempt per IDAPA 37.03.02 Beneficial Use Exam Rules.

Condition 01H, requiring a lockable device, has been met as the electrical control box can be locked as well as the irrigation control box. Condition 196 will be retained on the license. The filing of a completed well driller's report indicates that the permit holder complied with drilling permit requirements. Lastly, the permit includes a condition regarding combined limits with overlapping surface water right 71-7124. Mr. Bills submitted a Notice of Abandonment of Water Right for 71-7124 because he would prefer to use only ground water for irrigation. Thus, this condition is no longer applicable and will be removed.

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>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	05/01 to 10/31	0.10 CFS	13.5 AF
<u>Totals:</u>		0.100 CFS	13.50 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

Field Examiner's Name Alvin J. Jurek Date 11-13-2018

Reviewer _____ Date _____

Attachment to 71-10945
Beneficial Use Field Report -
System Diagram

Buried 1.25" pipe
with pop-up sprinklers approx. every 100 ft.
(approx. location; not to scale)

Point of Diversion
6" Well
D0064990

Irrigation Controller
(located on side of garage)

Tax Parcel Boundary

Additional sprinkler heads around house

State of Idaho
Department of Water Resources

Attachment to 71-10945 Beneficial Use Field Report
Map of POD and POU



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

0 0.035 0.07 0.14 Miles



Attachment to 71-10945 Beneficial Use Field Report - Photographs

📍 146°SE (T) 📍 44.250374°N, 115.004372°W ±16.4ft ▲ 6373ft



Attachment to 71-10945 Beneficial Use Field Report - Photographs

☼ 199°S (T) ● 44.250305°N, 115.004311°W ±16.4ft ▲ 6388ft



☼ 7°N (T) ● 44.250263°N, 115.005310°W ±32.8ft ▲ 6403ft

Place of Use



☼ 61°NE (T) ● 44.249676°N, 115.004234°W ±16.4ft ▲ 6390ft

