

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-32265

Exam Date: 8/27/2014

1. Current Owner: ROBERT C SHERMAN
15750 PARKVIEW DR
WILDER ID 83676
(208)337-4871
2. Accompanied by: ROBERT SHERAMN
Phone No: SAME AS ABOVE
Address: SAME AS ABOVE
Relationship to Permit Holder: SAME

3. SOURCE TRIBUTARY
RUBY DRAIN SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NONE
2. Other water rights with the same point of diversion: NONE

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

RUBY DRAIN SE1/4NW1/4NE1/4 Sec. 13, Twp 03N, Rge 05W, B.M.
CANYON County

Method of Determination: GARMIN GPS N 43.60029, W- 116.87718

2.

PLACE OF USE: IRRIGATION

Tw	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03N	05W	13			23.0														23.0

Total Acres: 23

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

Method of Determination: AERIAL PHOTOS, FIELD EXAM

4.

<u>Well or Diversion</u> <u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u> <u>Size</u>
__POD__	__BERKELEY	__3__	ILLEGIBLE__	BERKELEY	

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
2. Measurements: NONE TAKEN						

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E. FLOW CALCULATIONS _____Additional Computation Sheets Attached

1] THEORETICAL FLOW CALCULATION: 3 HP, 40 PSI as reported by permittee, HEAD = 0

$$8.8 \times 0.7 \times 3 \text{ HP} / 2.31 \times 40 \text{ PSI} = 18.48 / 92.4 = 0.2 \text{ CFS}$$

2] 80 gpm as reported by permittee = $80 / 448.4 = 0.18 \text{ cfs}$ – within 10% of permitted rate.

RECOMMEND PERMITTED FLOW = 0.2 CFS

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{\text{I.R.}} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 23 \text{ ACRES} \times 4.5 = 103.5 \text{ AF}$$

$$V_{\text{D.R.}} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.2 \times 261 \times 1.9835 = 103.5 \text{ AF}$$

$$V = \text{Smaller of } V_{\text{I.R.}} \text{ and } V_{\text{D.R.}} = 103.5 \text{ AF}$$

2. Volume Calculations for Other Uses: NOT APPLICABLE

G. NARRATIVE/REMARKS/COMMENTS

The permit was issued for 0.2 cfs for the supplemental irrigation of 30 acres [24 lots] from the Ruby Drain in the Seven Spring Subdivision. Irrigation is supplemental to Wilder Irrigation District shares. Robert Sherman accompanied me on the exam. Mr. Sherman stated that there is water in the Ruby Drain all year. It flows into the Snake River about 0.50 miles southwest of the POD. There was water flowing in the drain the day of the exam. No measurement was taken because the water in the drain is co-mingled with return water from the subdivision irrigation system.

There are no overlaps. Water right 63-12024 is for Mr. Sherman's pond and it has as one of the sources the Ruby Drain. However, the drain water is diverted to the pond before the drain water reaches the POD for this permit.

From the drain, there is a buried 12-inch diameter pipe that is buried in the bed of the drain, and under the east edge of the permittee's pond. The POD is at a point where the water exits the buried pipe and "drops" about 4 to 5 feet into the drain ditch again. After the water "drops", there is a 4-inch diameter buried pipe that takes the water from the drain ditch to a 3 hp pump, then to a valve where Wilder irrigation water is diverted to the POU. At this point, the drain water can be co-mingled with the Wilder water, or used by itself to supplement Wilder water, and diverted to pipeline to the lots. Each homeowner has their own pump. Mr. Sherman cannot remember where the pipeline is on the lots west of Parkview Drive, so the location was estimated on ArcMap diagram.

The water is also conveyed through buried pipe north along the east side of Parkview Dr. to irrigate these lots, and to a vertical corrugated pipe in the northeast corner of the POU. From this vertical pipe, there is an overflow pipe that carries the excess Wilder and drain water back to the drain and then to the pond.

There are 23 acres irrigated in the subdivision, and that includes one of the three lots originally excluded from the application [Lot 9, Blk 2]. There is a pump to the lot and it is probable that the owners have been irrigating along with everyone else. There is no increase in the permit by including 0.3 acre to POU, because the number of acres recommended for licensing is less than the number permitted. I did not take any pictures of the POU because an aerial illustrates the irrigated acres much better.

The rate of flow was calculated to be 0.8 cfs. The permitted flow of 0.2 cfs is recommended for licensing. The Vir and Vdr calculations both resulted in 103.5 af, so this is the volume recommended for licensing.

Have conditions of permit approval been met? ☒ Yes ☐ No

The following condition should be edited:

X60 Place of use is located within Lots 1-4 and 6-9, Block 1, Lots 1-~~9~~ 7 and part of 8 & 9, Block 2, Lots 1-4, Block 3 and Lots 1-8, Block 4, Seven Springs Park Subdivision.

H. RECOMMENDATIONS

- 1) Permit amount 0.2 cfs
- 2) Beneficial use limit 0.46 cfs
- 3) System measurement 0.8 cfs
- 4) Proof fee amount 0.2 cfs

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	0.200 CFS	103.50 AF
<u>Totals:</u>		0.200 CFS	103.50 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name Wick Matic Date 9-5-14

Reviewer _____ Date _____

63-32265 –Field Exam Photographs



The Ruby Drain.



Buried pipe from the Ruby Drain to the "drop" at the POD.



Ruby Drain water drops into lower drain ditch. There is a buried 4-inch pipe that conveys water to the pump.



Three hp pump and irrigation piping for irrigation of Mr. Sherman's property.



The three hp pump.



The buried 4-inch pipe for irrigation of the rest of the subdivision.



The vertical pipe that is the overflow for excess irrigation water. From here the water is recirculated back to the drain and to the pond.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

July 31, 2014

ROBERT C SHERMAN
15750 PARKVIEW DR
WILDER, ID 83676

Re Permit To Appropriate Water No. 63-32265

Dear MR. SHERMAN:

The permit referenced above was issued for 0.20 cfs for the irrigation of 30 acres from the Ruby Drain. The irrigation is supplemental to Wilder Irrigation District surface water. This letter is to request that you call me to schedule the field exam for this permit. A field exam is required by Idaho law before a license can be issued, at which time it becomes a water right. The license is the end product needed for continued water use.

Additionally, please have available at the exam someone familiar with the system and its construction, and have available information about the pump and motor for my file. I will GPS the point of diversion and take photographs of the point of diversion and the irrigated place of use during the exam.

Please call me at 208.334.2190, to set an appointment for the exam. Failure to respond to this letter request **by September 1, 2014**, may result in the permit being voided or a license issued for less than the permitted amount. Thank you.

Sincerely,



Vicky Music
Sr. Water Resource Agent