

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-13533
Exam Date: 06/19/2018

1. Current Owner:
DAN CONRAD 830 BANKS LOWMAN RD GARDEN VALLEY ID 83622-8102
2. Accompanied by: Dan Conrad
Phone No: 208-995-6117
Address: Same
Relationship to permit Holder:

3. **SOURCE:**
SPRING

Tributary
MIDDLE FORK PAYETTE RIVER

Method of Determination: Field Observation

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap

Comments: Domestic rights 65-10667 and 65-10668 are w/in same QQ description but for different parcel.

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

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

SPRING SE¼ NW¼ SW¼, Sec. 16, Twp 09N, Rge 04E, B.M. BOISE County

Method of Determination: Garmin Handheld GPS

PLACE OF USE: IRRIGATION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
09N	04E	16										X							

PLACE OF USE: DOMESTIC

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
09N	04E	16												X					

PLACE OF USE: IRRIGATION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
09N	04E	16										0.2	0.8	2.7					3.7

Total Acres: 3.7

Method of Determination: Field observation, aerial imagery, and ArcMap GIS tools.

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
N/A	N/A	N/A	N/A	N/A	N/A

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5 Gal Bucket	N/A	N/A	N/A	N/A	N/A	N/a

E. FLOW CALCULATIONS☐ Additional Computation Sheets Attached

Measured Method: 5 Gallon Bucket Test Time Trials

8' 45" average time over 3 trials.

5 gal ÷ 8.75 min = 0.57 gpm = 0.001 cfs → **0.01 cfs****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation Storage & Irrigation from Storage:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = (3.7 \text{ acres}) \times (3.5) = 13.0 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = [0.01 \text{ (cfs)}] \times (184 \text{ days}) = 3.6 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 3.6 \text{ af}$$

2. Volume Calculations for Other Uses: Domestic = 13,000 gpd/home per conditions; 1.2 af per Admin Memo #22.

Permit	109.5 af
B.U. Standard Allowance	13.0 af
Measured Volume	3.6 af
B.U. Proof Fee	\$50.00 → 0 to 20 af
License Recommendation	3.6 af

G. NARRATIVE/REMARKS/COMMENTS

Field exam was completed by agent Justin Shearer on June 19, 2018 and was accompanied by permit holder Dan Conrad. Conrad is the active permit owner and original applicant. The application for permit was submitted on September 23, 1994 by Allen and Kathleen Vaughan. The permit was later assigned to Steve and Mary Jo Semels and proof of beneficial use was made on October 31, 2000. On April 16, 2018 the permit was assigned to Dan Conrad.

The applicant diverts from a spring in several spots 10-20 feet apart on his property that is then piped to 26,000 gallon storage tank for Domestic, Irrigation Storage, and Irrigation from Storage purposes. Upon field exam, it was observed that the permit was developed slightly differently than proposed as a result of the storage tank. Additionally, the Point of Diversion (POD) was developed in a different legal description than proposed and permitted. The POD was permitted to be developed in the NE ¼ SW ¼ SW ¼ of TWP 09N, Rge 04E, Sec 16, but Conrad is actually diverting water from the spring in the SE ¼ NW ¼ SW ¼ of TWP 09N, Rge 04E, Sec 16. Furthermore, because Conrad is not irrigating directly from the spring, there is no 'Irrigation' use but rather 'Diversion to Storage,' 'Irrigation Storage,' and 'Irrigation from Storage' uses. Aerial imagery and field observation were used to determine irrigated acres. ArcMap tools were used to calculate and area of 3.7 acres being irrigated. I am recommending amendments to clarify all beneficial uses and POD locations.

The capacity of the storage tank is 0.08 af. Because the Diversion to Storage rate is only 0.01 cfs the daily volume is limited to 0.02 af, requiring multiple days to fill the storage tank to capacity, and thus requiring a storage component to the right. The measured rate of diversion is a limiting factor for all components of the permit/license recommendation. During the field exam I observed two Domestic structures (house and tent cabin) as part of the developed system which would otherwise allow for a rate of 0.08 cfs, however I am only able to recommend 0.01 cfs, which is more than the measured rate of 0.001 cfs. Moreover, 3.7 acres of irrigated land would otherwise allow for an annual volume of 18.5 af, however I am only able to recommend an annual Irrigation from Storage volume of 3.6 af as that is the amount of water that 0.01 cfs is able to produce in the 184 days throughout the season of use of 4/15 to 10/15. Therefore, 0.08 af is needed for initial fill and an additional 3.52 af is needed to meet the needs for the Irrigation from Storage use. The Domestic use should be considered a flow through system. I am recommending a 1.2 af volume limit per Admin Memo #22.

The Diversion to Storage rate was measured to be 0.001 cfs during field exam using a 5 gallon bucket test method, however 0.01 cfs is the lowest diversion rate recognized by IDWR. The spring is diverted to the storage tank using 1" polyline that continuously flows into the storage tank. As a result, there is no measuring device as part of the diverting works, however the recommended amount is less than 0.20 cfs so a measuring device is not required. The storage tank is located at the north end of Conrad's property at an elevation of 3216 ft and delivers water downhill for Domestic purposes to two structures, a house and a tent cabin, at elevations of 3110 ft, and 3147 ft. and 730 ft. and 536 ft. away in distance respectively. For irrigation, the tank delivers water to two frost free spigots that Conrad can hook hoses to as needed. There are no pumps involved and the system relies on gravity and elevation to create pressure. At only 3.6 af for 3.7 acres, which is less than 1 af/ac, the applicant gains beneficial use from such a low volume because he only irrigates periodically throughout the season in order to maintain the ground as grazing pasture for a couple of horses.

Condition 03A was updated to R70 to account for the Irrigation from Storage component. Condition R05 was added to identify that this right is within a water district and will be regulated by the water master and replaced 005. Because the use is less than 0.20 cfs condition 01J was removed and 01R and R02 were added in its place. Condition WB5 replaced the existing descriptive condition in order to clarify that the domestic component of the right does not include irrigation.

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>
DIVERSION TO STORAGE	01/01 to 12/31	0.01 CFS	
IRRIGATION STORAGE	01/01 to 12/31		3.6 AF
IRRIGATION FROM STORAGE	04/15 to 10/15		3.6 AF
DOMESTIC	01/01 to 12/31	0.01 CFS	1.2

Totals: 0.01 CFS 4.8 AF

2. Recommended Amendments

☒ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ Nature of Use
☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ None

I. AUTHENTICATION Justin Shearer - Water Resource Agent, Senior

Field Examiner's Name Justin Shearer Date 7/29/19

Reviewer _____ Date _____





Pic looking down
into one of the
springs.



Pic of polyline
coming from
springs towards
storage tank.



Pic of storage tank.



Pic of 5 gallon
bucket test.



Pic of Irrigation
from Storage POU.



Pic of tent cabin
Domestic POU.



Pic of house
Domestic POU.



Pic of frost-free
spigot used to
irrigate.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 W AIRPORT WAY • BOISE, ID 83705-5082

Phone: (208)334-2190 • Fax: (208)334-2348 • Website: www.idwr.idaho.gov

Brad Little
Governor

Gary Spackman
Director

July 12, 2019

DAN CONRAD
830 BANKS LOWMAN RD
GARDEN VALLEY ID 83622-8102

COPY

RE: Water Right Permit No. 65-13533

Dear Permit Holder(s):

The Department of Water Resources is reviewing the permit(s) referenced above prior to issuing water right license(s). By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit.

The examiner who verified your water use reported that certain elements of the permit(s) have been developed differently than described on your permit(s). Changes that do not increase the authorized use of water under the permit(s) can be requested and approved in accordance with Idaho Code § 42-211. Before license(s) can be issued, your permit(s) must be amended to depict your water use as it was actually developed.

Based on the examiner's report, the following elements were developed differently than described on your permit(s):

☒ Point(s) of Diversion

☒ Place(s) of Use

☒ Nature of Use

The enclosed Application for Amendment form(s) depicts the elements of the water right(s) as they will appear on the license(s) when issued. Please review the amendment form(s) carefully. If you concur with the information presented, please sign and return the form(s) with the filing fee of \$100.00 within fourteen (14) days.

If you have any questions, please call me at (208) 334-2190.

Sincerely,

Justin Shearer
Water Resource Agent, Senior

Enclosure(s): Application for Amendment



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

May 25, 2018

DAN CONRAD
830 BANKS-LOMAN
GARDEN VALLEY, ID 83622

RE: Scheduling Field Exam for Water Right Permit No. 65-13533

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the above-referenced permit **this season**. An examination is needed to verify the water use in order to issue a water right license.

The above-referenced permit authorizes **0.380 CFS** from a **SPRING** tributary to **MIDDLE FORK PAYETTE RIVER** for **IRRIGATION & DOMESTIC** use. **If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If that use was developed, but have ceased using the water and you currently carry no interest in it, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

If you did develop a beneficial use of water under the permit, but you no longer own the place of use property identified in the permit, please submit the enclosed Assignment of Permit form with the applicable \$25 processing fee.

Please contact me within the next thirty (30) days at (208) 334-2190 to either schedule an examination or submit a relinquishment or assignment form. If you no longer own the place of use property and/or do not respond to this letter, the department will work with the current property owner to issue a license or void the permit.

Sincerely,

Justin Shearer
Water Resource Agent

Enclosures: Relinquishment of Permit form
Assignment of Permit form
Water Permit Report and Map