

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-13820

Exam Date: 6/25/2013

1. Current Owner: STEVE HERRON
7 RIVER RD
GARDEN VALLEY ID 83622
(208)462-3720
2. Accompanied by: Henry Vanderwyk
Phone No: (208) 462-4447
Address:
Relationship to Permit Holder: Landscaper

3. **SOURCE**

MIDDLE FORK PAYETTE RIVER

TRIBUTARY

PAYETTE 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 SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

MIDDLE FORK PAYETTE RIVER

SE1/4SE1/4

Sec. 27, Twp 10N, Rge 04E, B.M.

BOISE County

Method of Determination: Arc Map (Aerial Photo)

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
10N	04E	27	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	0.6
																			0.6

Total Acres: 0.6

Method of Determination: Arc Map (Aerial Photo); Tax Lots.

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.

<u>Well or Diversion 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 Size</u>
N/A	A.O. Smith	2	Unknown	Flotec	2"

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
N/A						

2. Measurements: No field measurement. Unable to obtain a pressure measurement with a Pitot Tube.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 2/40 + (2.31 \times 50) = 12.32/155.50 = 0.08 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.08 \text{ cfs} > 0.03 \text{ cfs } Q(\text{permit})$$

$$HP = 2$$

$$Z = 40' \text{ (Estimated)}$$

$$P = 50 \text{ psi (Assumed)}$$

Appears that the current pumping system can attain the permit diversion rate of 0.03 cfs.

Recommend the permit diversion rate of 0.03 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.6 \times 3.5 = 2.10 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \times 231 \times 1.9835 = 13.75 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 2.10 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS**WATER SUPPLY SYSTEM:**

A 2-hp centrifugal pump diverts water from the Middle Fork of the Payette River through a 2" flexible hose, and discharges the water through a 2" PVC main line to the pressurized irrigation system.

IRRIGATION SYSTEM:

Approximately 0.60 acres of lawn and landscaping is irrigated by a pressurized irrigation system with a mixture of pop-up sprinklers. The pressurized irrigation system is comprised of four (4) stations, with approximately nine (9) sprinklers per station. The sprinklers are a mixture of Nelson and Rainbird.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 65-13820.

Place of Use: There are no place of use overlaps for Water Right Permit No. 65-13820.

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

CONDITION NO.5 (01H) – Prior to diversion of water under this right, the right holder shall install a lockable device. On April 30, 2001, the Department received a letter from Mark Limbaugh, District 65 Watermaster, approving the right holder's request to waive the requirement to install a lockable device. With Condition No.5 waived, the right holder is in compliance with the conditions of approval for Water Right Permit No. 65-13820.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.03	&/or	N/A
Beneficial Use Limit	0.03	&/or	N/A
System Measurement	0.08(theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.03	&/or	N/A

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	3/15 to 10/31	0.030 CFS	2.10 AFA
<u>Totals:</u>		0.030 CFS	2.10 AFA

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 Rick Collingwood Date 11/13/13

Reviewer _____ Date _____

SWSE

SESE

27

POU

10N04E

POD

PUMP

Boone Rd

River Ln

River Rd

Legend

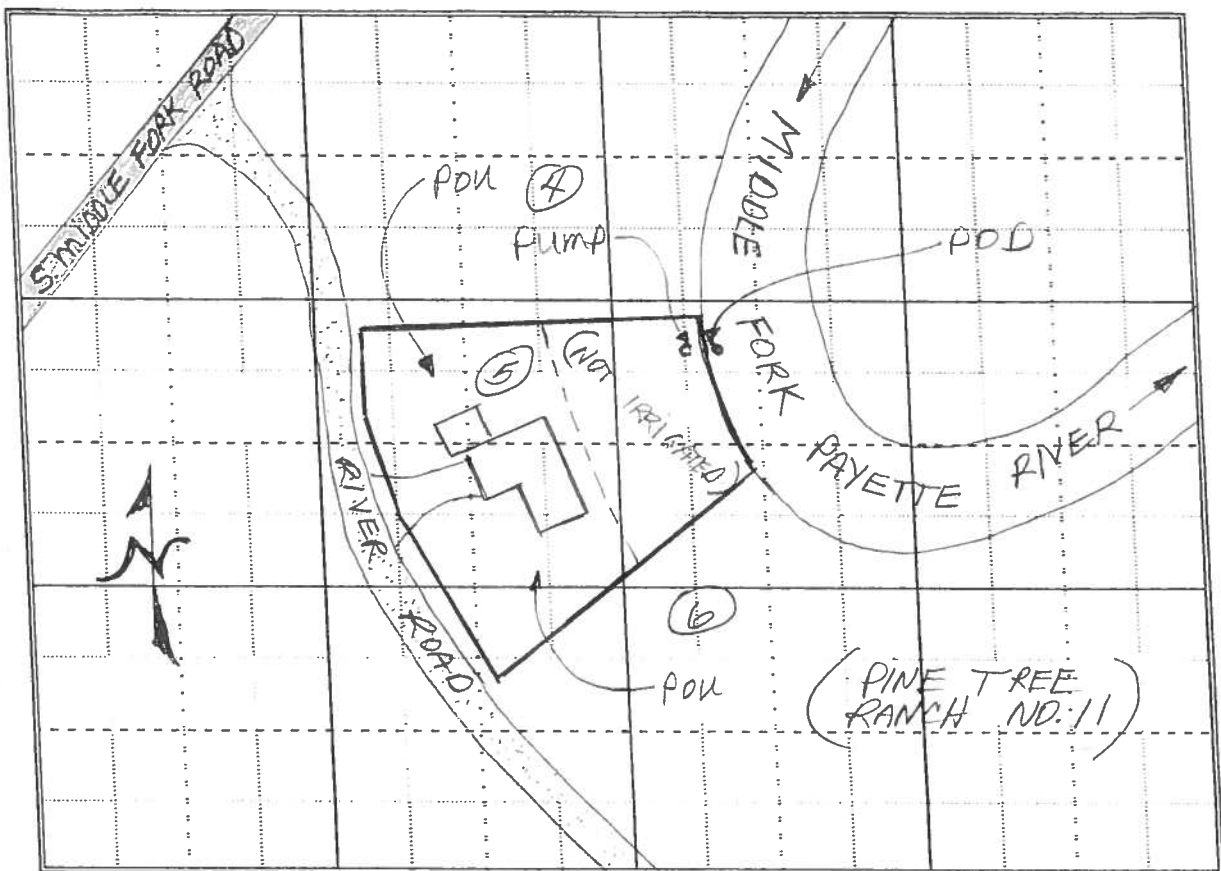
- POD
- POU
- Township/Range
- Sections
- QQ

Source: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

0 50 100 200 300 400

Feet

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.



Scale: 1" = NTS

- ☐ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

FIELD EXAM PHOTOS

Water Right Permit: 65-13820

Field Exam Date: 6-25-13

PLS: SE1/4, SE1/4 Section 27, T.10N, R.04E.

Field Examiner: RC



Point of Diversion: View northeasterly of the 2" flexible hose suction line on the west bank of the Middle Fork of the Payette River.



View easterly of the 2-hp centrifugal pump, 2" flexible hose suction line, and the 2" PVC discharge line on the west bank of the Middle Fork of the Payette River.



Place of Use: View northwesterly of the lawn and landscaping being irrigated by the pressurized irrigation system.



Place of Use: View northeasterly of the lawn and landscaping being irrigated by the pressurized irrigation system.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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June 6, 2013

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

Steve Herron
7 River Road
Garden Valley, ID 83622

RE: Scheduling Field Exam for Water Right Permit No. 65-13820

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of June 24, 2013**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal operating conditions during the examination. The permit authorizes the diversion of 0.03 cfs of surface water from the Middle Fork of the Payette River for irrigation of 1.0 acre.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by June 21, 2013, to conduct the exam during the week of June 24, 2013.** If there is a problem with scheduling or conducting the examination at this time, please let me know so we can reschedule or make other arrangements.

I appreciate your attention to this matter and I look forward to hearing from you.

Sincerely,

Rick Collingwood, P.E.
Water Resource Agent, Sr.