

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-13904

Exam Date: 6/26/2013

1. Current Owner: JAMES A PASSIE
10 SCOTT MOUNTAIN RD
GARDEN VALLEY ID 83622
2. Accompanied by: James Passie
Phone No: (208) 462-8092
Address: Same
Relationship to Permit Holder:

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

NW1/4NE1/4

Sec. 23, 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
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
10N	04E	23		.5															.5

Total Acres: 0.5

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	Unknown	1.5	Unknown	Unknown	1 1/2"

*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 pressure measurement with Pitot Tube.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 1.5/25 + (2.31 \times 30) = 9.24/94.30 = 0.10 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.10 \text{ cfs} > 0.02 \text{ cfs } Q(\text{permit})$$

$$HP = 1.5$$

$$Z = 25' \text{ (Estimated)}$$

$$P = 30 \text{ psi (Assumed)}$$

Appears that the current pumping system can attain the permit diversion rate of 0.02 cfs.

Recommend the permit diversion rate of 0.02 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \times 2.5 = 1.3 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.02 \times 231 \times 1.9835 = 9.2 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.3 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A

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

A 1.5-hp submersible pump, placed in a 4" PVC pipe sleeve, diverts water through a 1 ½" PVC pipe discharge line from the Middle Fork of the Payette River to the right holder's pressurized irrigation system for irrigation of approximately 0.50 acres of lawn and landscaping.

IRRIGATION SYSTEM:

The pressurized irrigation system is comprised of eight (8) stations. Five (5) stations operate with Rainbird MaxPan sprinklers with 9/64" nozzles. Three (3) stations operate with pop-up 'spray' type sprinklers. Each station contains 4 – 5 sprinklers.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 65-13904.

Place of Use: There are no place of use overlaps for Water Right Permit No. 65-13904.

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

CONDITION NO.1 (01H) – Prior to diversion of water under this right, the right holder shall install a lockable device. The pump control/junction box mounted on the outside wall of the garage, contains a hasp for locking the box with a padlock. Right holder is in compliance with Condition No.1.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.02	&/or	N/A
Beneficial Use Limit	0.02	&/or	N/A
System Measurement	0.10 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.02	&/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	0.020 CFS	1.3 AFA
<u>Totals:</u>		0.020 CFS	1.3 AFA

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 ___ Other

I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 11/14/13

Reviewer _____ Date _____

MEMORANDUM

TO: Files 65-13942 & 65-13904

FROM: Kay Walker *KW*

RE: Volume Recommendations

Date: November 20, 2013

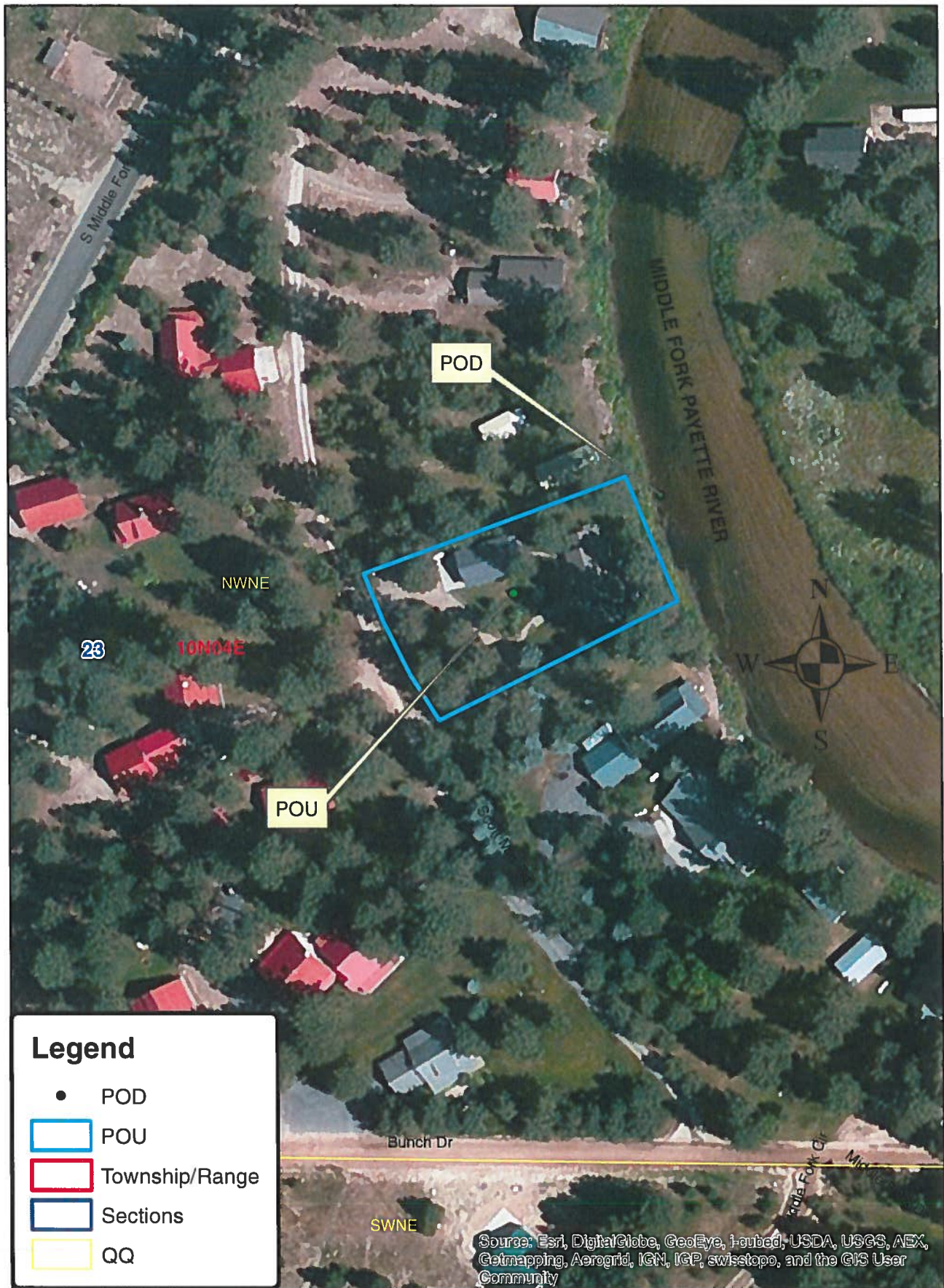
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When examiner reviewed permit to write up field exam he used the volume limiter in conditions of approval to propose volume for the licenses. The volume limiter in conditions was used on permits that were issued for less than 1 acre in size. In case of 65-13942, IDWR issued permit for 0.5 acres – limited to 1.8 afa at field headgate. $0.5 \text{ ac} \times 3.5 \text{ afa} = 1.75$ rounds to 1.8 afa. In case of 65-13904, IDWR issued permit for 0.7 acres – limited to 2.5 afa at the field headgate. $0.7 \text{ ac} \times 3.5 \text{ afa} = 2.45$ afa rounds to 2.5 afa.

Discussed the use of condition X31 with examiner so he could watch for these oddities in the future.

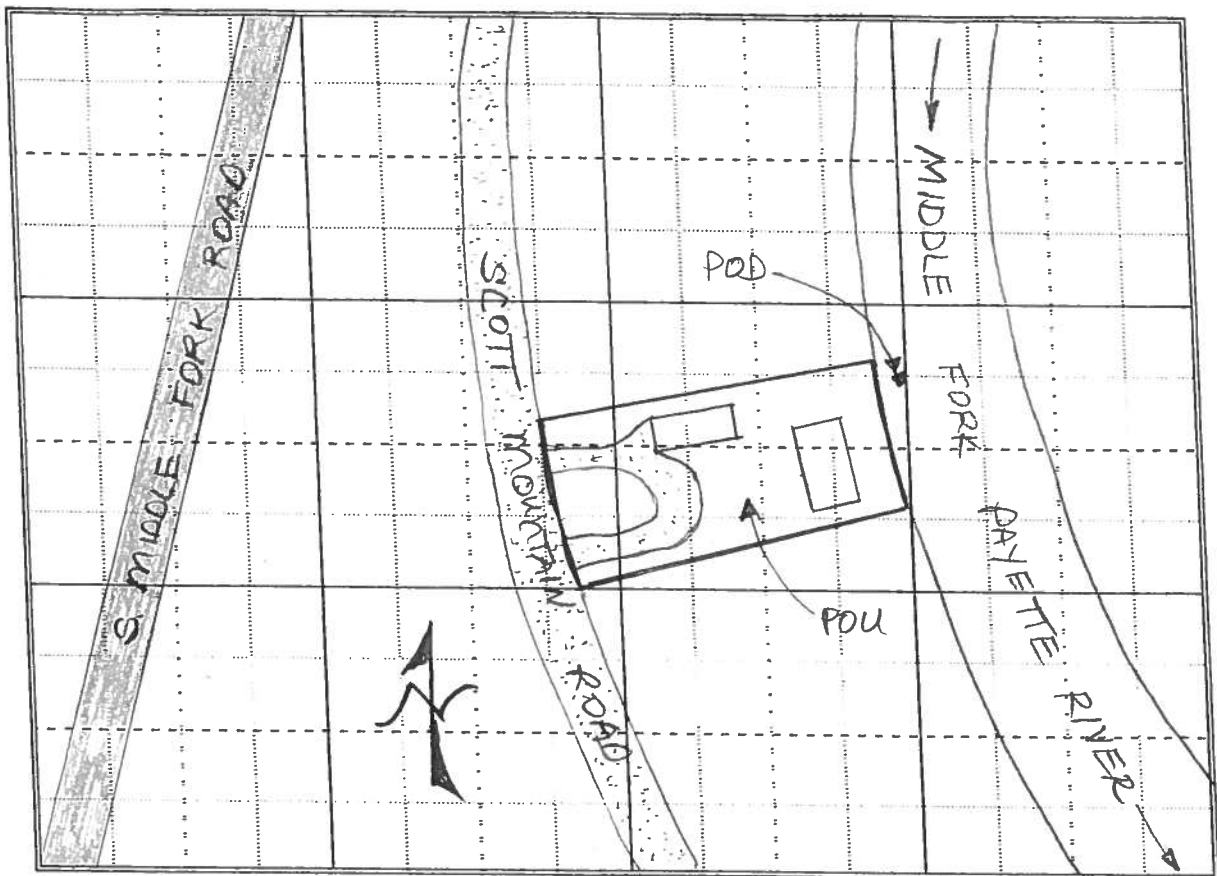
65-13904

ESRI AERIAL PHOTO - 2012



0 30 60 120 180 240
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: 65-13904

Field Exam Date: 6-26-13

PLS: NW1/4, NE1/4 Section 23, T.10N, R.04E.

Field Examiner: RC



Point of Diversion: View easterly of the submersible pump 4" PVC sleeve near the west bank of the Middle Fork of the Payette River.



Place of Use: View westerly 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

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

June 12, 2013

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

James A. Passie
10 Scott Mountain Road
Crouch, ID 83622

RE: Scheduling Field Exam for Water Right Permit No. 65-13904

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 0.02 cfs of surface water from the Middle Fork of the Payette River for irrigation of 0.7 acres.

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,

A handwritten signature in black ink that reads "Rick Collingwood". The signature is written in a cursive, flowing style.

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