

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

Permit No: 65-22881

Exam Date: 6/14/2013

1. Current Owner: HAROLD W HATTEN JR  
6200 NORTHVIEW  
BOISE ID 83704  
(208)375-2085
2. Accompanied by: Lois Hatten & Marvin Hill  
Phone No: Same  
Address: Same  
Relationship to Permit Holder: Wife and Neighbor

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 SYSTEM**1. 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 |
|-----|-----|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| 10N | 04E | 23  | <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> |        |
|     |     |     |           | .5        |           |           |           |           |           |           |           |           |           |           |           |           |           |           | .5     |

Total Acres: 0.5

## Method of Determination:

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                              | AEPM              | 2         | 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> |
|------------------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|
| Pitot Tube                   |             |             |                  |                   |             |                    |
|                              |             |             |                  |                   |             |                    |

2. Measurements: Pitot Tube. Measured operating pressure – 24 psi (with leakage). Assume an operating pressure of 30 psi.

**E. FLOW CALCULATIONS**

\_\_\_\_ Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 2/20 + (2.31 \times 30) = 12.32/89.30 = 0.14 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.14 \text{ cfs} > 0.02 \text{ cfs } Q(\text{permit})$$

$$HP = 2$$

$$Z = 20' \text{ (Estimated)}$$

$$P = 30 \text{ psi}$$

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:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \times 3.5 = 1.8 \text{ AFA}$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.8 \text{ AFA}$$

## 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 for irrigation of the right holder's property. A 1 ½" flexible hose suction line is connected to a screened cage near the west bank of the Middle Fork of the Payette River. Water is discharged through 1 ½" PVC main line to four (4) frost free hydrants situated throughout the property. The right holder irrigates their property by connecting hoses to the frost free hydrants to sprinkler irrigate the lawn and landscaping.

**OVERLAP ANALYSIS:**

**Point of Diversion:** There are no point of diversion overlaps for Water Right Permit No. 65-22881.

**Place of Use:** There are no place of use overlaps for Water Right Permit No. 65-22881.

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

**CONDITION NO.5** – Prior to diversion under this right, the right holder shall install a lockable device. The right holder's pump house has a locking hasp mounted on the door, and the main fuse/control box is located in the locked garage. Right holder has complied with Condition No. 5.

### 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        | 0.14(theoretical)  | &/or | N/A          |
| Proof Fee Amount          | 0.20               | &/or | N/A          |
| <b>Recommended Amount</b> | 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            | 03/15 to 10/31       | 0.020 CFS             | 1.80 AFA             |
|                       | <u>Totals:</u>       | 0.020 CFS             | 1.80 AFA             |

##### 2. Recommended Amendments

\_\_\_Change P.D. as reflected above    \_\_\_Add P.D. as reflected above    XNone

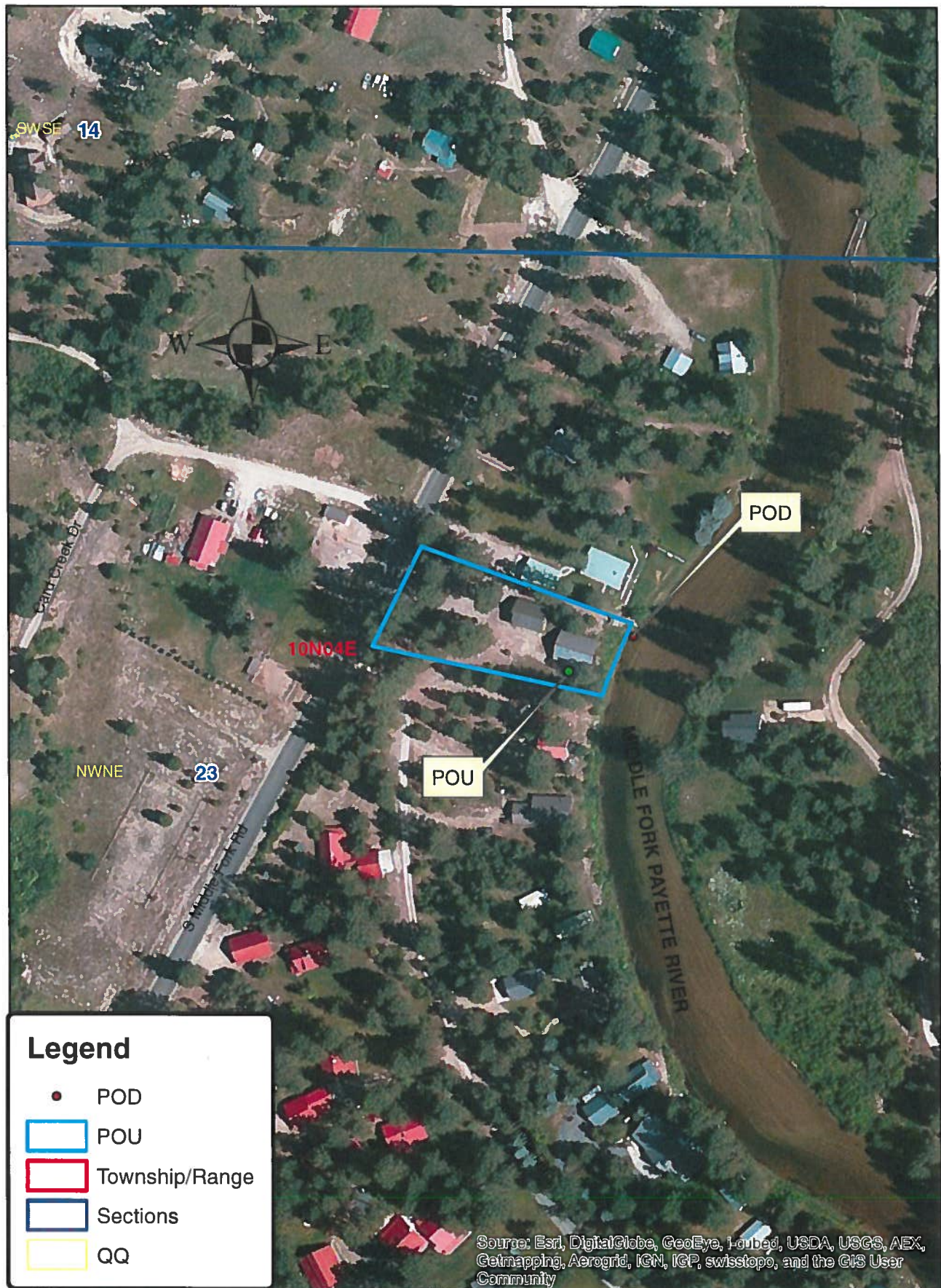
\_\_\_Change P.U. as reflected above    \_\_\_Add P.U. as reflected above    \_\_\_Other

#### I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 10/24/13  
 Reviewer \_\_\_\_\_ Date \_\_\_\_\_

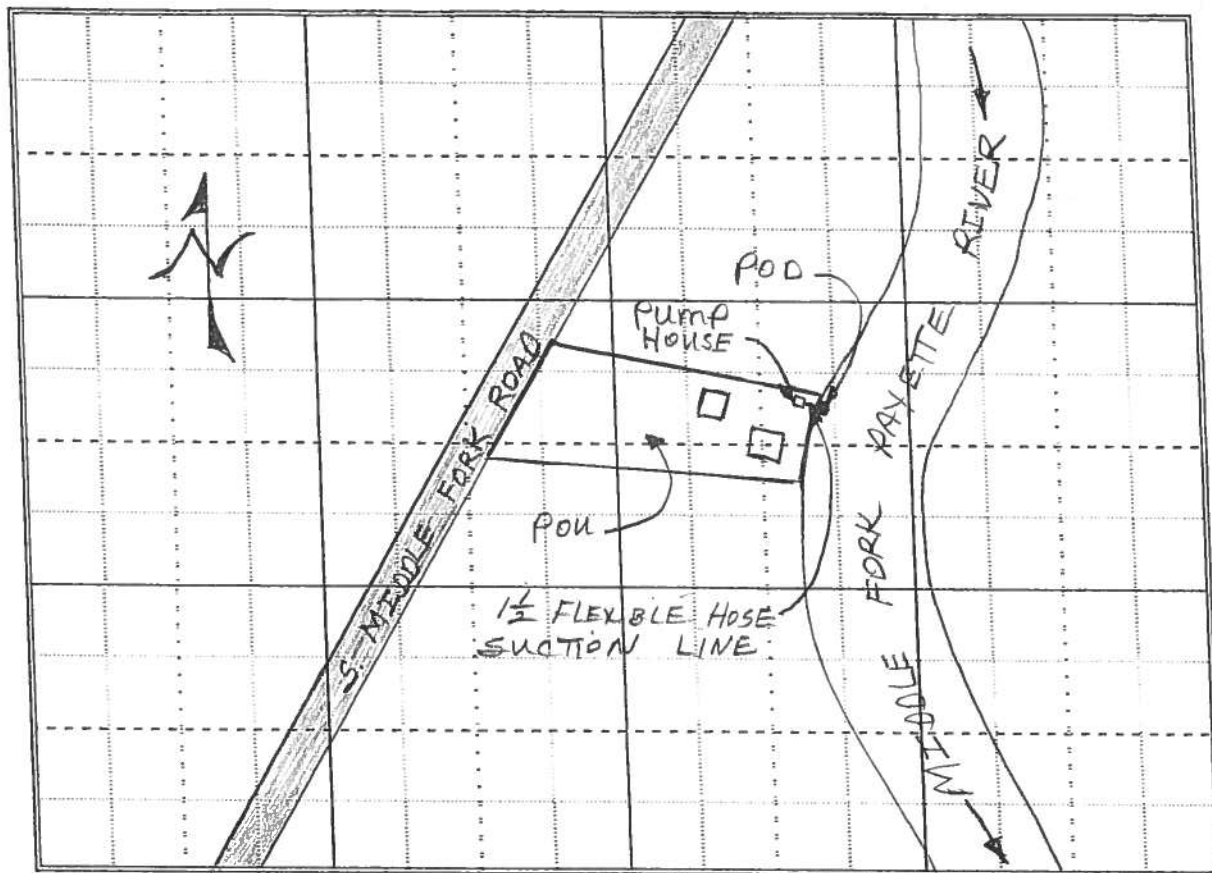
65-22881

ESRI AERIAL PHOTO - 2012



0 55 110 220 330 440 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: 65-22881

Field Exam Date: 6-14-13

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

Field Examiner: RC



Point of Diversion: View easterly of a screened cage and a 1 1/2" flexible hose suction line located near the westerly bank of the Middle Fork of the Payette River. A total of three (3) suction lines divert water from the screened cage.



View easterly of the pump house. A 6" PVC pipe sleeve exiting the west side of the pump house protects the discharge piping and wiring to the garage where the fuse/control box is located. Three pumps to serve three different properties are located in the pump house.



Place of Use: View easterly of right holder's irrigation system watering a portion of the lawn and landscaping.



Place of Use: View northerly of a section of the right holder's property being irrigated by a hose and sprinkler connected to a frost free hydrant.



State of Idaho

**DEPARTMENT OF WATER RESOURCES**

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

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C. L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Interim Director

May 30, 2013

Harold W. Hatten, Jr.  
6200 Northview  
Boise, ID 83704

**RE: Scheduling Field Exam for Water Right Permit No. 65-22881**

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of June 10, 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 7, 2013, to conduct the exam during the week of June 10, 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.