

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22893

Exam Date: 5/30/2014

1. Current Owner: ALAN D HART
14 SCOTT MOUNTAIN RD
GARDEN VALLEY ID 83622
(208)384-9710

And

LINDA S HART
14 SCOTT MOUNTAIN RD
GARDEN VALLEY ID 83622
(208)384-9710

2. Accompanied by: Linda Hart
Phone No: Same
Address: Same
Relationship to Permit Holder: Owner

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	G.E.	2	Unknown	Meyers	9860194, 4"

*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: Unable to obtain irrigation system pressure measurement from sprinklers. Pitot tube was too small for 'blue' sprinkler nozzles in Maxi-Paw sprinklers.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 2/20 + (2.31 \times 45) = 12.32/123.95 = 0.10 \text{ cfs}$$

$$Q(\text{sprinkler}) = 9 \text{ sprinklers} \times 3.7 \text{ gpm} = 0.07 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.10 \text{ cfs} > 0.07 \text{ cfs} \quad Q(\text{sprinkler}) > 0.02 \text{ cfs} \quad Q(\text{permit})$$

$$HP = 2$$

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

$$P = 45 \text{ psi (Assumed)}$$

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:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \times 1.8 \text{ AFA} = 0.90 \text{ AFA}$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 0.90 \text{ AFA}$$

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 approximately 0.5 acres of lawn and landscaping.

IRRIGATION SYSTEM:

A 2-hp centrifugal pump diverts water from the river through 4" flexible hose. Water is discharged through 4" PVC irrigation main line to a pressurized irrigation system. The irrigation system is comprised of four (4) stations. Each station is comprised of Rain Bird Maxi-Paw rotary impact sprinklers. Each sprinkler has a 'blue' nozzle. Based on the two stations operating during the field exam, each station operates between 8 and 9 sprinklers.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 65-22893.

Place of Use: There are no place of use overlaps for Water Right Permit No. 65-22893.

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

CONDITION NO.3 (01H) – Prior to diversion of water under this right, the right holder shall install a lockable device. The main power switch/breaker for the irrigation pump is located in a mechanical room in the garage. The right holder has complied with Condition No.3.

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	03/15 to 10/31	0.020 CFS	0.90 AFA
	<u>Totals:</u>	0.020 CFS	0.90 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

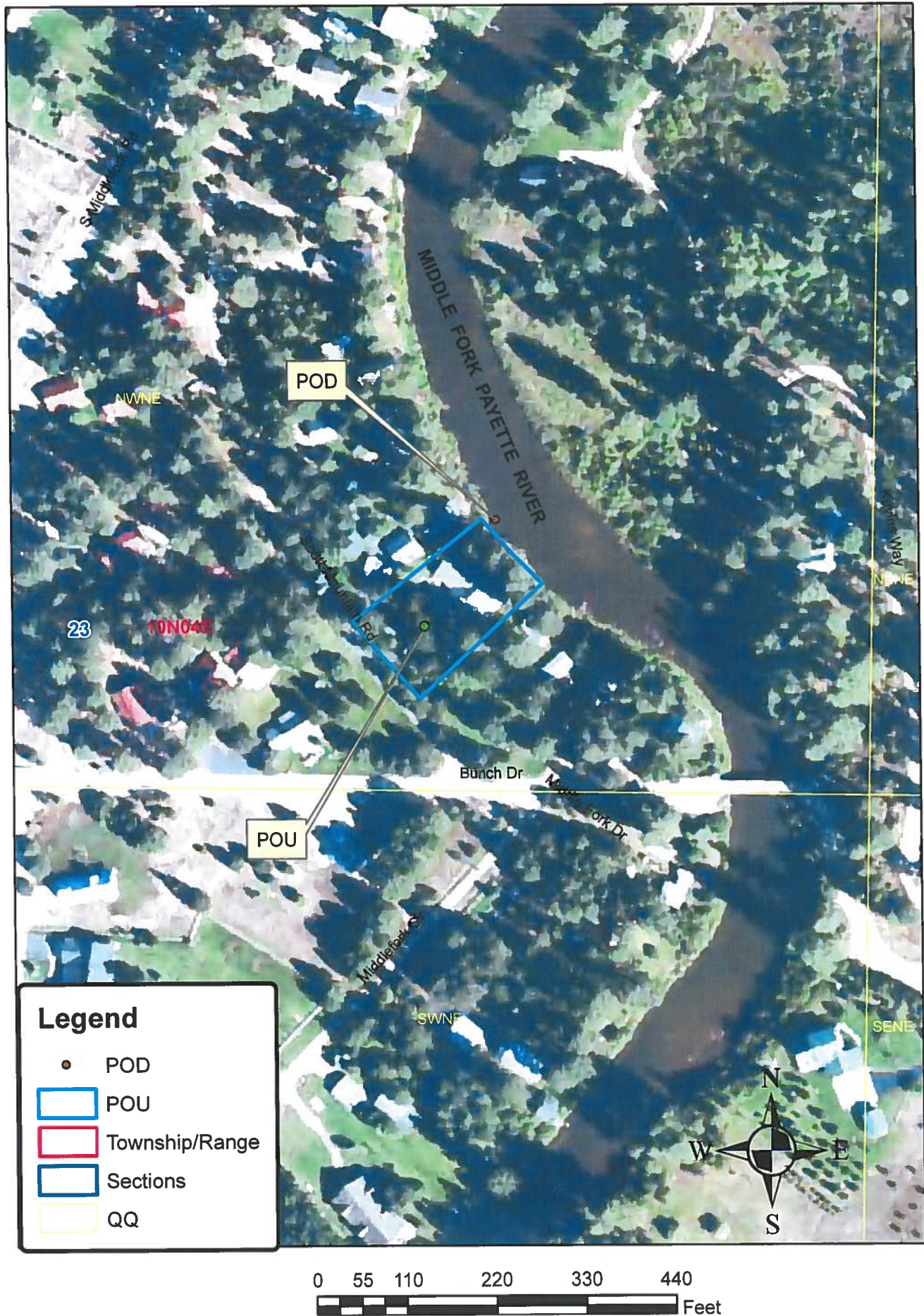
I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 6-10-14

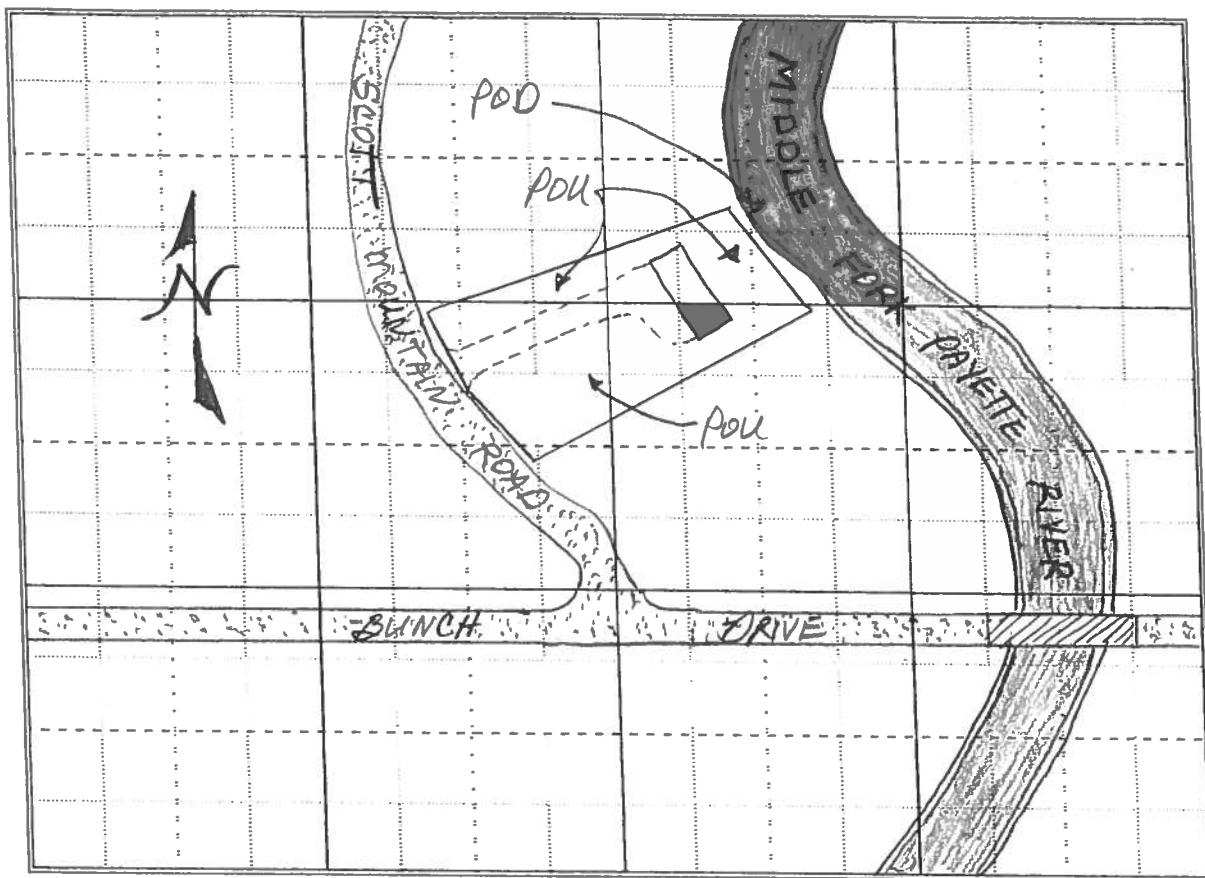
Reviewer _____ Date _____

65-22893

AERIAL PHOTO - 2013



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: 65-22893

Field Exam Date: 5-30-14

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

Field Examiner: RC



Point of Diversion: View of two 4" flexible suction lines in the Middle Fork of the Boise River. One suction line is connected to the right holder's pump to serve Lot 4, Scott Mountain Subdivision. The other suction line is connected to a pump which serves Lot 5, Scott Mountain Subdivision.



View inside of pump vault. The centrifugal pump at the top of the photo is owned and operated by the right holder to service Lot 4. The other centrifugal pump is owned and operated by the owner's of Lot 5.



Place of Use: View westerly of a portion of the lawn and landscaping being irrigated by Rain Bird Maxi-Paw high impact rotary sprinklers.



Place of Use: View easterly of the right holder's lawn and landscaping being irrigated by Rain Bird Maxi-Paw high impact rotary sprinklers.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

PHONE: (208) 334-2190 FAX: (208) 334-2348 www.idwr.idaho.gov

C.L. "BUTCH" OTTER, Governor
April 30, 2014

GARY SPACKMAN, Director

Wayne E. & Helen L. McDonald
14 Scott Mountain Road
Garden Valley, ID 83622

RE: Scheduling Field Exam for Water Right Permit No. 65-22893

Dear Permit Holder:

The Idaho Department of Water Resources (IDWR) is planning to conduct water right field examinations in the vicinity of the above-referenced permit **during the week of May 19**. An examination is needed to verify water use(s) developed under the permit in order to issue a water right license.

Your permit authorizes the diversion of surface water from the Middle Fork of the Payette River for irrigation. If you developed a beneficial use of water and still own the place of use property identified in the permit, please contact me at your earliest convenience to schedule an examination.

If you developed a beneficial use of water under the permit but no longer own the place of use property, please use the enclosed Assignment of Permit form (\$25 fee). This will allow IDWR to work with the new permit owner through the water right licensure process.

A water right license cannot be issued if beneficial use of water was not developed or if use was developed but abandoned. If either of these cases has occurred, please relinquish the permit by using the enclosed Relinquishment of Permit form (no fee required). The permit will be voided if a relinquishment form is not submitted within thirty (30) days. If you no longer own the property and do not assign or relinquish your permit, IDWR will work with the current property owner to issue a license or to void the permit.

Please contact me to schedule a field examination for a day and time that is convenient for you. **Please call me at (208) 334-2190 by May 14 to conduct the field exam during the week of May 19.** If there is a problem with scheduling or conducting the field examination at this time, please let me know so we can reschedule.

Please call me at (208) 334-2190 if you have any questions. I appreciate your attention to this matter and look forward to hearing from you.

Sincerely,

Rick Collingwood, P.E.
Staff Engineer

Enclosure: Relinquishment and Assignment of Permit Forms