

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22832

Exam Date: 8/14/2013

1. Current Owner: RICHARD G POSTON
PO BOX 964
MCCALL ID 83638
(208)634-8798
2. Accompanied by: Richard Poston
Phone No: Same
Address: Same
Relationship to Permit Holder:

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 65-3218, 65-3219A, 65-3219X
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NE1/4SE1/4 Sec. 23, Twp 18N, Rge 03E, B.M.
VALLEY County

Method of Determination: Arc Map (Aerial Photo); GPS – Latitude N.44°52.796', Longitude W.116°02.942'; Datum – NVD83.

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>	
18N	03E	23													2.5			1.5	4.0

Total Acres: 4

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>
D0053201	Unknown_	_1.5_	_Unknown_	_Grundfos_	_____Unknown_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

*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. Operating gauge pressure of 52 psi.

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 1.5/44 + (2.31 \times 52) = 9.24/164.12 = 0.06 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.06 \text{ cfs} < 0.14 \text{ cfs } Q(\text{permit})$$

$$HP = 1.5$$

$$Z = 44'$$

$$P = 52 \text{ psi (Gauge)}$$

The total irrigable acres for this permit is 4.0 acres, not 7.0 acres as indicated on the permit. Therefore, the maximum allowable water appropriation would be 0.08 cfs. Appears that the current pumping system cannot attain the permit diversion rate of 0.14 cfs, or the maximum allowable diversion rate of 0.08 cfs to irrigate 4.0 acres. Recommend the theoretical pumping capacity diversion rate of 0.06 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.0 \times 3.0 = 12.0 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.06 \times 200 \times 1.9835 = 23.8 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 12.0 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A

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

A 1.5-hp submersible pump diverts ground water for irrigation of 4.0 acres of landscaping and field grasses.

IRRIGATION SYSTEM:

The right holder's main source of irrigation water is surface water delivered by the Lake Irrigation District. The surface water is used to flood irrigate the right holder's property. The ground water well is used to supplement the surface water. However, approximately 3/4-acre of upland area south of a landscape pond, which is not serviceable by the surface water system, is irrigated by the ground water well with pop-up rotary sprinklers.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 65-22832.

Place of Use: Water Right Permit No. 65-22832 and Lake Irrigation District Water Rights 65-3218, 65-3219A, and 65-3219X have overlapping places of use.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.14	&/or	N/A
Beneficial Use Limit	0.08	&/or	N/A
System Measurement	0.06	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.06	&/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	04/15 to 10/31	0.060 CFS	12.0 AFA
<u>Totals:</u>		0.060 CFS	12.0 AFA

2. Recommended Amendments

___ Change P.D. as reflected above ___ Add P.D. as reflected above X None

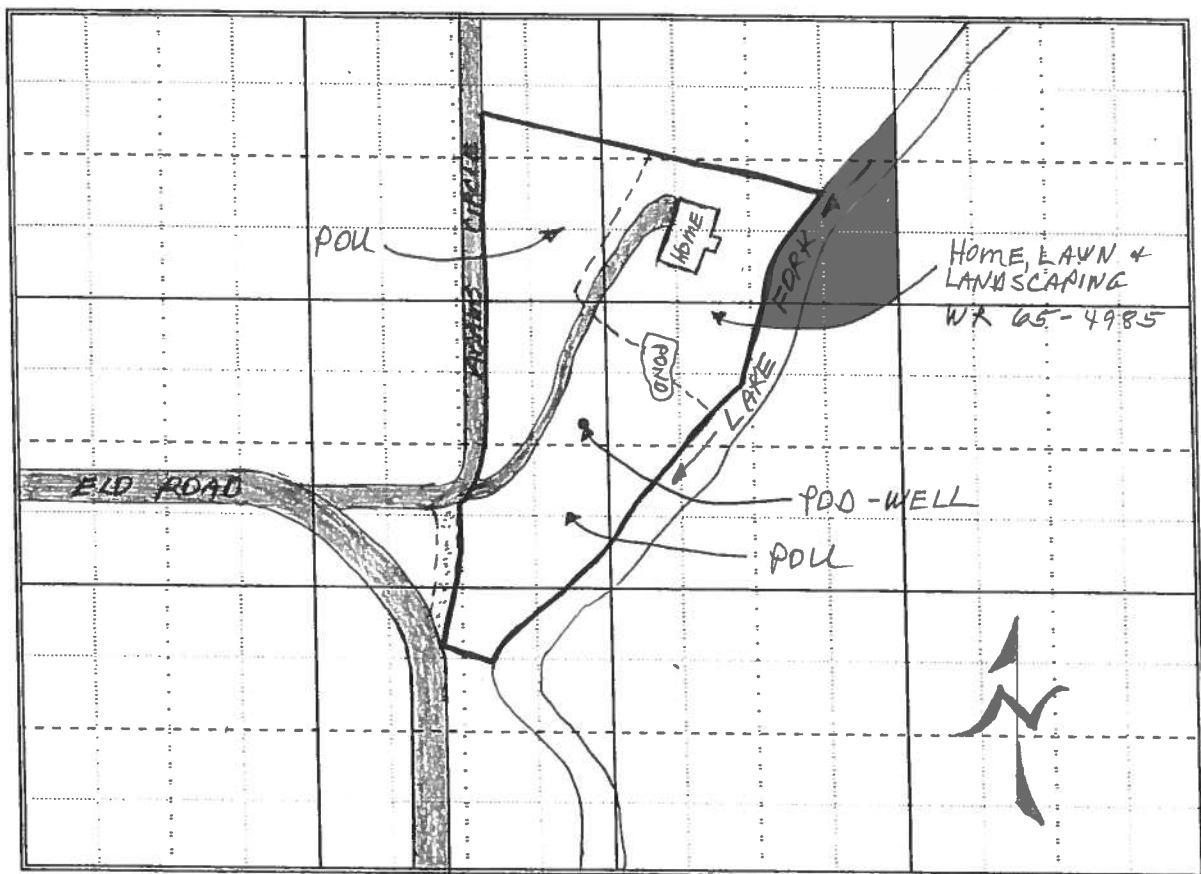
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 12/30/13

Reviewer _____ Date _____

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: 65-22832

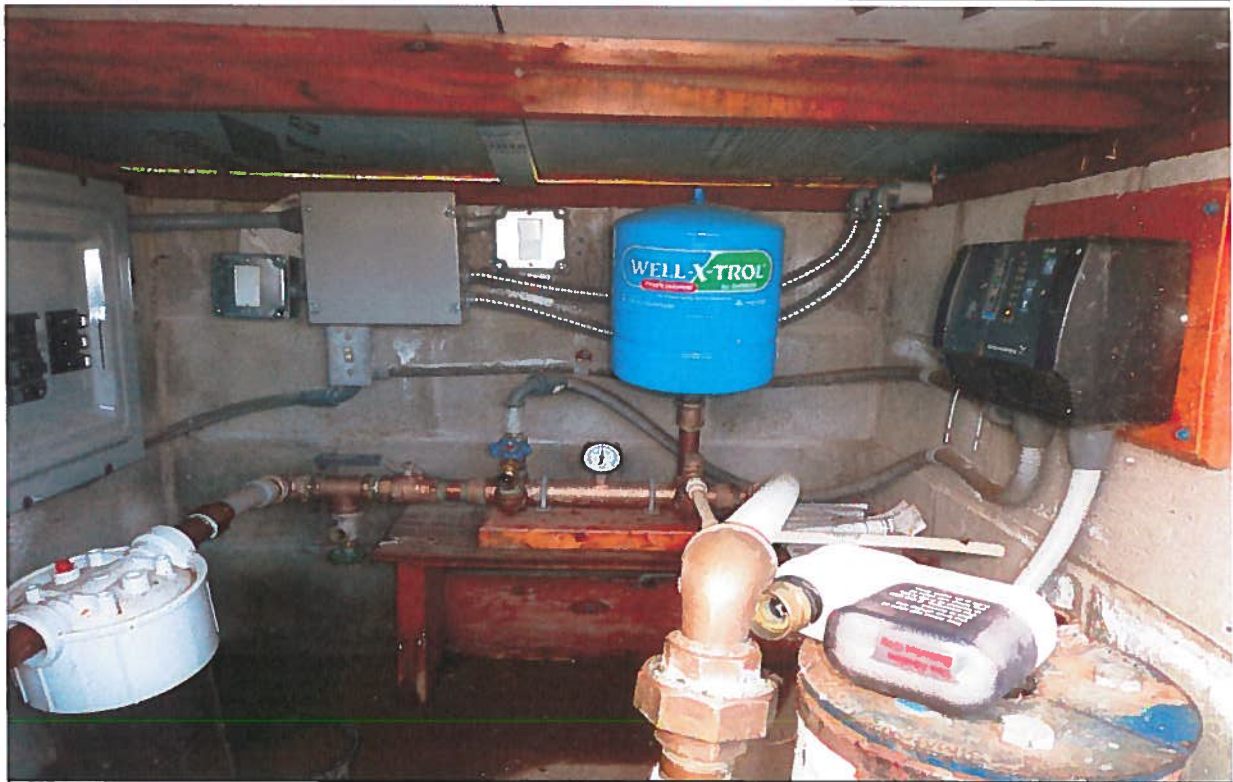
Field Exam Date: 8-14-13

PLS: NE1/4, SE1/4 Section 23, T.18N, R.03E

Field Examiner: RC



Point of Diversion: View of ground water well located near a small pump enclosure.



View inside the small pump enclosure near the ground water well.



Place of Use: View northerly from the pump enclosure of the pressurized irrigation system irrigating lawn and landscaping southerly of the right holder's pond.



Place of Use: View southwesterly of an irrigated field located south of the well and pump enclosure.



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

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July 24, 2013

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

Richard G. Poston
P.O. Box 964
McCall, ID 83638

RE: Scheduling Field Exam for Water Right Permit No. 65-22832

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of August 12, 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 0.14 cfs of ground water for irrigation of 7.0 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 August 2, 2013, to conduct the exam during the week of August 12, 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.