

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22780

Exam Date: 8/12/2013

1. Current Owner: BRENT RICHARDS
1350 CHRIS LN
MCCALL ID 83638
(208)794-1308
2. Accompanied by: Brent Richards
Phone No: Same
Address: Same
Relationship to Permit Holder:

3. SOURCETRIBUTARY

GROUND WATER

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:

GROUND WATER

SW1/4SW1/4NE1/4

Sec. 19, Twp 18N, Rge 03E, B.M.

VALLEY County

Method of Determination: Arc Map (Aerial Photo); GPS – Latitude N.44°53.028', Longitude W.116°08.132'; Datum – NVD83.

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
18N	03E	19	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
					X														

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
18N	03E	19	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
					8.0														8.0

Total Acres: 8

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</u> <u>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</u> <u>Size</u>
D0025389	Franklin_	_3_	_Unknown_	_Gould_	_Unknown_
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>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 36 psi.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 3/160 + (2.31 \times 36) = 18.48/243.16 = 0.08 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.08 \text{ cfs} < 0.20 \text{ cfs } Q(\text{permit})$$

$$HP = 3$$

$$Z = 160'$$

$$P = 36 \text{ psi}$$

Appears that the current pumping system cannot attain the permit diversion rate of 0.20 cfs.

Recommend the theoretical pumping capacity of 0.08 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 8 \times 3.0 = 24.0 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.08 \times 200 \times 1.9835 = 31.7 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 24.0 \text{ AFA}$$

2. Volume Calculations for Other Uses: Domestic (Internal Use) – 2 Homes

$$V = 2 \times 0.6 = 1.2 \text{ AFA}$$

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

A 3-hp submersible pump diverts ground water for domestic use for two (2) homes and irrigation of approximately 8 acres of pasture and lawn.

IRRIGATION SYSTEM:

The irrigation system is comprised of approximately 400 lineal feet of 1 ¼" PVC pipe and a single impact sprinkler to irrigate the pasture areas. The lawn areas are irrigated by a pressurized irrigation system, which is comprised of pop-up rotary and spray sprinklers.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 65-22780.

Place of Use: There are no place of use overlaps for Water Right Permit No. 65-22780.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.20	&/or	N/A
Beneficial Use Limit	0.20	&/or	N/A
System Measurement	0.08(theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.08	&/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>
DOMESTIC	01/01 to 12/31	0.040 CFS	1.6 AFA
IRRIGATION	04/15 to 10/31	0.040 CFS	24.0 AFA
<u>Totals:</u>		0.080 CFS	25.6 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

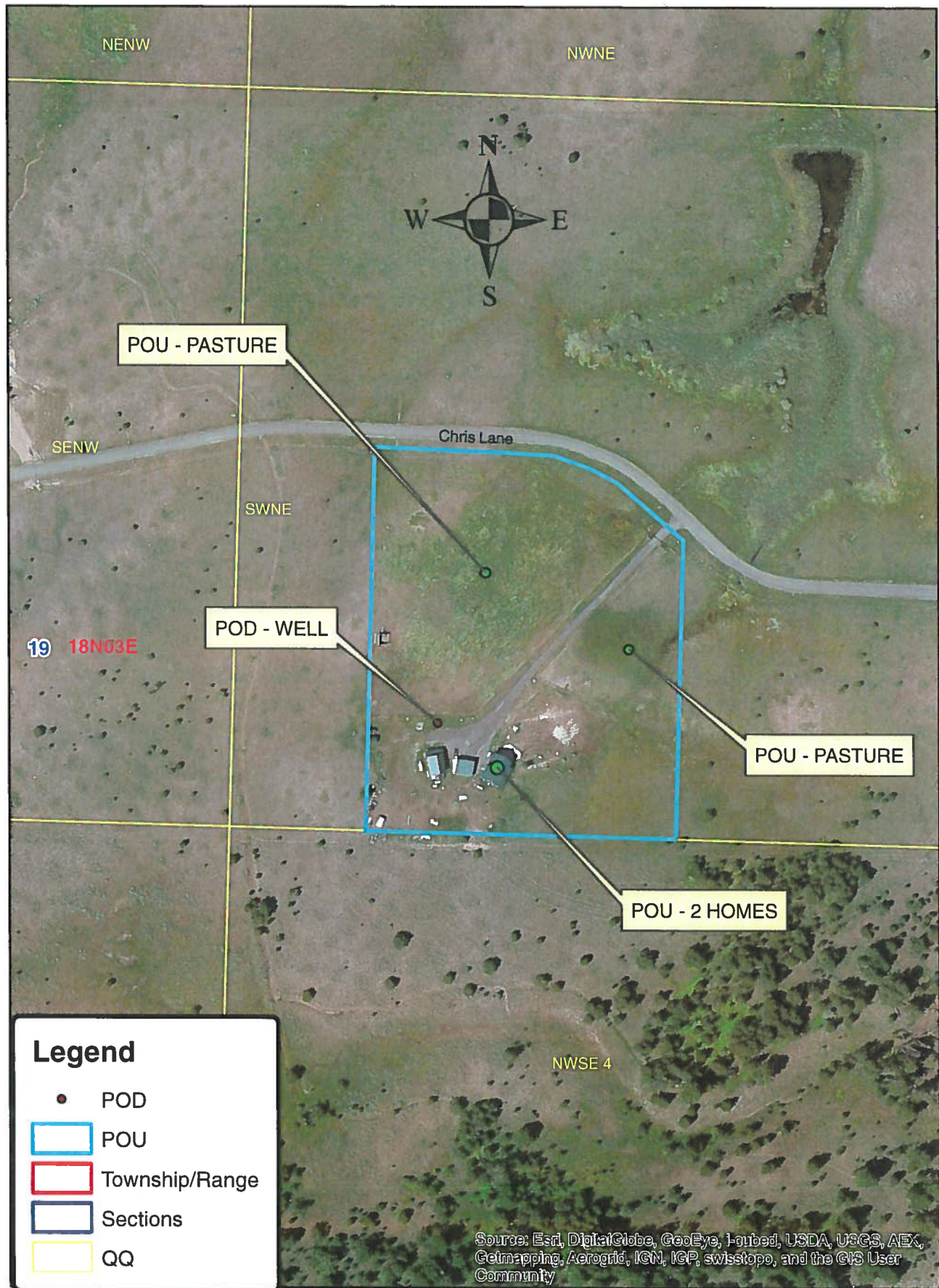
I. AUTHENTICATION

Field Examiner's Name *Rick Allington* Date 12/16/13

Reviewer _____ Date _____

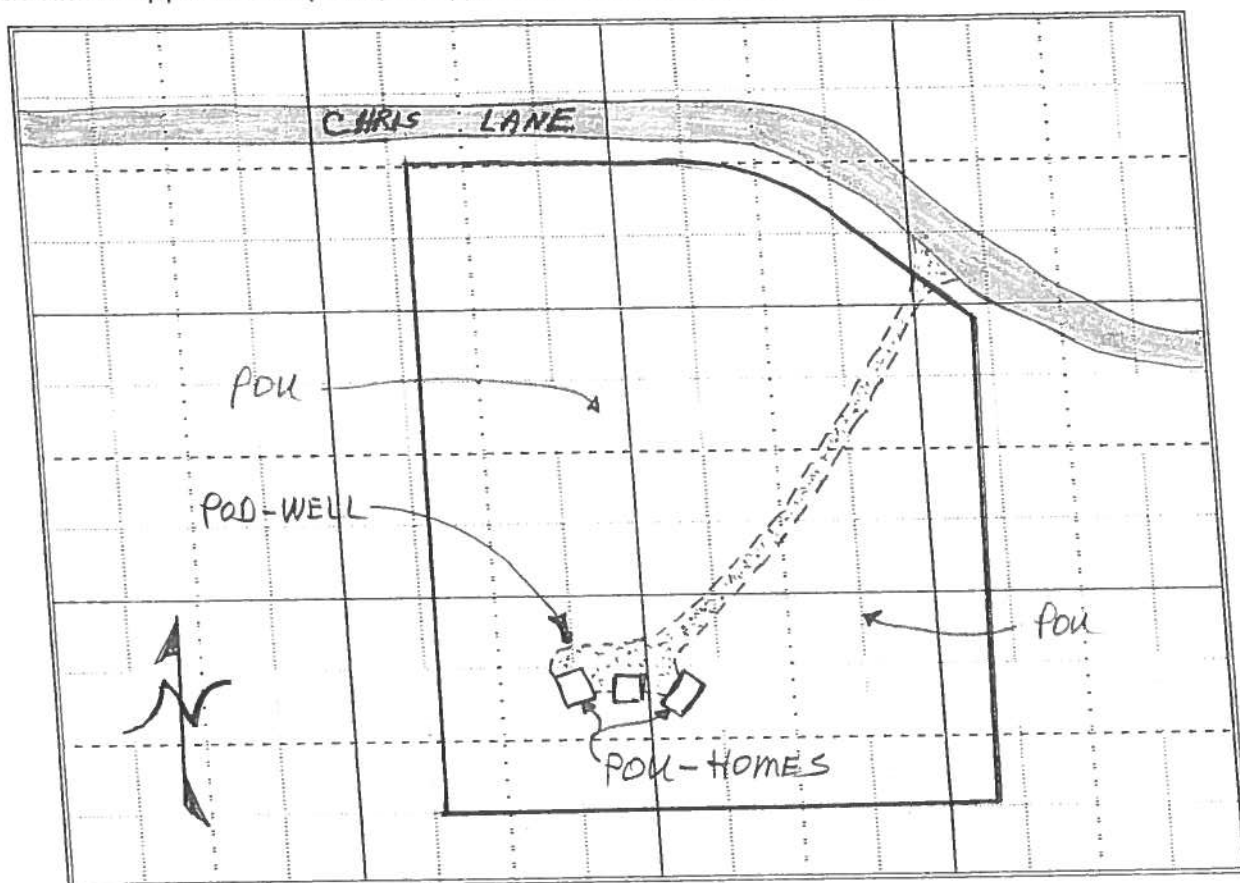
65-22780

ESRI AERIAL PHOTO - 2012



0 80 160 320 480 640 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

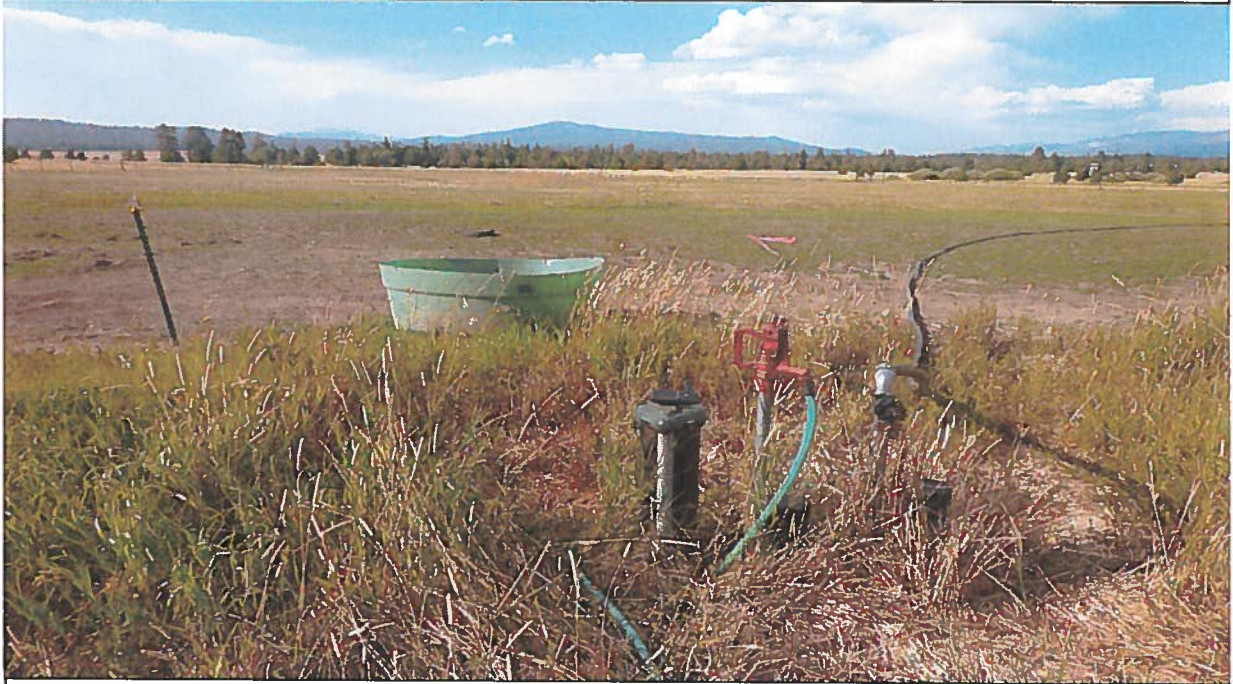
FIELD EXAM PHOTOS

Water Right Permit: 65-22780

PLS: SW1/4, NE1/4 Section 19, T.18N, R.03E

Field Examiner: RC

Field Exam Date: 8-12-13



Point of Diversion: View northeasterly of the ground water well and 400' of 1 1/4" PVC supply line to an impact rotary sprinkler.



Place of Use: View northeasterly of the 1 1/4" PVC supply line and an impact rotary sprinkler irrigating a pasture.



Place of Use: View southeasterly of the home served by the ground water well for domestic use.

MEMORANDUM

Date: December 24, 2013
To: Water Right File 65-22780
From: kwalker
Re: Field Exam Review

While reviewing this proposal I found the examiner had limited the irrigation use to 0.04 cfs. Normally we would allow 0.08 cfs for the irrigation use and 0.04 for the domestic use and limit both to 0.08 cfs. This is a better way to recognize the development. Rt. 65-2697A also appurtenant to this land. Rt. holder must not use per examiners remarks. Use R62 to limit if used and combined with this right. Also found the examiner recommended 1.6 af for domestic even though his calculations show 2 homes x 0.6 af/home. Recommend 1.2 afa for domestic. Added subdivision name to place of use.



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

July 24, 2013

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

Brent Richards
1350 Chris Lane
McCall, ID 83638

RE: Scheduling Field Exam for Water Right Permit No. 65-22780

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 0.20 cfs of ground water for domestic use for 2 homes, and irrigation of 8.0 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,

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.