

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-21644

Exam Date: 6/4/2015

1. Current Owner: JACK NELSON
1635 E 1500 S
GOODING ID 83330
(208)934-4783

And

KATHY NELSON
1635 E 1500 S
GOODING ID 83330
(208)934-4783

And

CHARLES JOHNSON
1635 E 1500 S
GOODING ID 83330
(208)934-4783

And

BECKY JOHNSON
1635 E 1500 S
GOODING ID 83330
(208)934-4783

2. Accompanied by: Jack Nelson
Phone No: 208-358-0141
Address: Same as above
Relationship to Permit Holder: co-permit holder

3. SOURCE
GROUND WATER

TRIBUTARY

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-8717 and 37-8740 are irrigation rights for the subdivision
2. Other water rights with the same point of diversion: 37-8717 and 37-8740 are diverted from the same well

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER
GOODING County

L2 SW1/4NW1/4NE1/4

Sec. 5, Twp 06S, Rge 15E, B.M.

Method of Determination: ArcMap aerial imagery and site visit

2. **PLACE OF USE:** DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06S	15E	5		X															
				L 2															

Method of Determination: ArcMap aerial imagery and site visit

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>
		15			

*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>
Flowmeter	Sonic	Fuji				

2. Measurements: Performed a 10 minute flowmeter test with four of the stub outs pipes open.

E. **FLOW CALCULATIONS**☒ Additional Computation Sheets Attached

Measured Method: The maximum recorded flow was 189 gpm or 0.42 cfs. This was sufficient flow to satisfy the two irrigation rights, 37-8717 (0.08 cfs) and 37-8740 (0.09 cfs) in addition to this permit (0.12 cfs)

F. **VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation: NA

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

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

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

2. Volume Calculations for Other Uses: domestic, in-house use – 0.6 AF/lot x 7 lots = 4.2 AF

G. NARRATIVE/REMARKS/COMMENTS

The field exam for permit 37-21644 was completed on June 4, 2015, with Jack Nelson, a co-holder of the permit, present. The permit is for in-house use for a small subdivision which is in the process of being developed (proof was submitted on April 7, 2015) on the eastern outskirts of Gooding. One house was present previous to the permit application, and is still connected to the Gooding city water supply, though Mr. Nelson intends to remove it from the city system and supply it from this permit. This permit is for in-house use only, as two water rights supply irrigation for the property, in addition to canal shares.

One well and a 15 HP pump supply both the domestic permit and the two ground water irrigation rights. From the well, the water enters the pump house (a working flowmeter is present) which contains a pressure tank and variable frequency drive, and upon exiting the pump house, the water is split via a valve to the irrigation system and the domestic system. Currently, there are stub outs to all seven lots, and flowing water is available to all lots (see attached photos).

A ten minute flowmeter test was run on the system, with four of the stub out pipes opened up to achieve sufficient flow for this permit and the two irrigation rights. The maximum flow recorded was 189 gpm (0.42 cfs); this is adequate to satisfy the irrigation rights (37-8740, 0.09 cfs, 37-8717, 0.08 cfs) in addition to this permit (0.12 cfs). The permit therefore, should be licensed for 0.12 cfs. I recommend licensing the permit for a volume of 4.2 AF based on 0.6 AF per home for in-house use.

The property on lots 2 – 7 is currently farmed and is planted to alfalfa hay under a wheel line irrigation system.

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

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	0.120 CFS	4.20 AF
<u>Totals:</u>		0.120 CFS	4.20 AF

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  Date 6/4/2015
 Reviewer  Date 6/24/15

LD04
No. 04
LOG NAME:JACK
START :06-04 09:55
END :06-04 10:05
INTERVAL:00:01:00

6/4/2015 10:00

+1.195E+1 ft/s
+1.876E+2 gal/m
+TOTAL 0000854 gal
NORMAL

6/4/2015 10:01

6/4/2015 9:55
+5.325E+1 ft/s
+8.357E+2 gal/m
+TOTAL 0000000 gal
ABNORMAL

+1.192E+1 ft/s
+1.871E+2 gal/m
+TOTAL 0001041 gal
NORMAL

6/4/2015 10:02

6/4/2015 9:56
+1.193E+1 ft/s
+1.873E+2 gal/m
+TOTAL 0000196 gal
NORMAL

+1.201E+1 ft/s
+1.886E+2 gal/m
+TOTAL 0001229 gal
NORMAL

6/4/2015 10:03

6/4/2015 9:57
+1.196E+1 ft/s
+1.877E+2 gal/m
+TOTAL 0000379 gal
NORMAL

+1.199E+1 ft/s
+1.882E+2 gal/m
+TOTAL 0001415 gal
NORMAL

6/4/2015 10:04

6/4/2015 9:58
+1.015E+1 ft/s
+1.594E+2 gal/m
+TOTAL 0000533 gal
NORMAL

+1.198E+1 ft/s
+1.880E+2 gal/m
+TOTAL 0001603 gal
NORMAL

6/4/2015 10:05

6/4/2015 9:59
+1.185E+1 ft/s
+1.860E+2 gal/m
+TOTAL 0000667 gal
NORMAL

+1.191E+1 ft/s
+1.869E+2 gal/m
+TOTAL 0001790 gal
NORMAL

Permit 37-21644 Beneficial Use Exam

Maximum recorded flow = 189 gpm or 0.42 cfs

Exam Date - 6/4/2015



POD – Subdivision Well

Pump House



37-21644



Flowmeter

Plumbing Inside Pump House

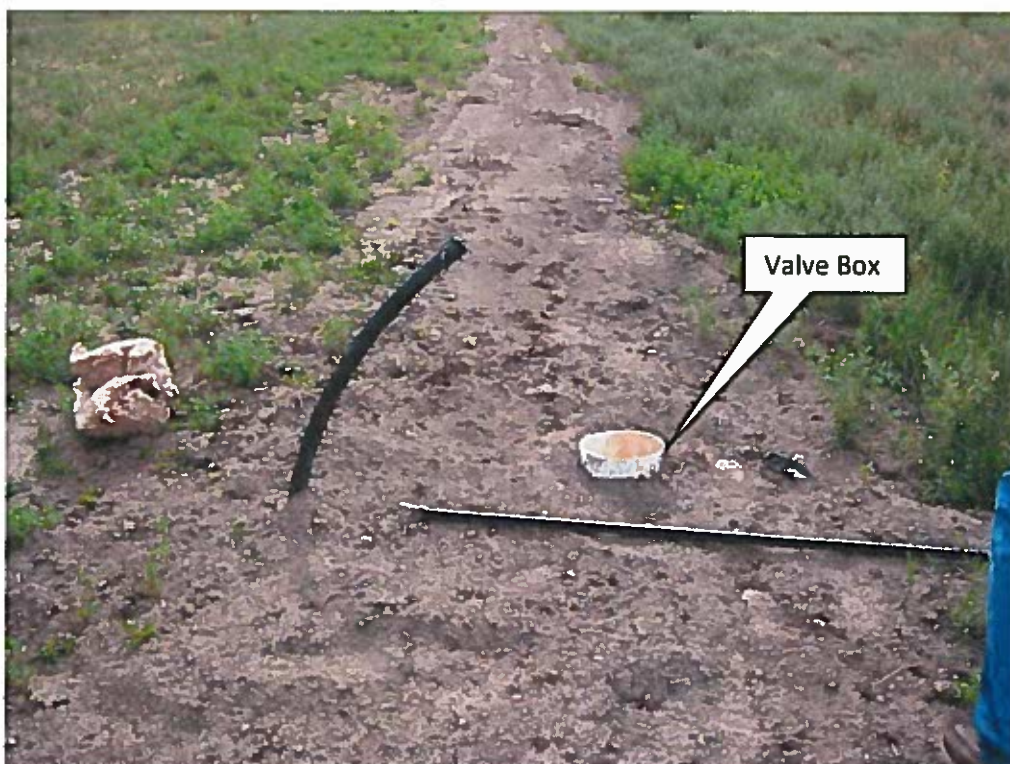


37-21644



Stub Out With Water Flowing

Each Stub Out Has a Control Valve





View of Property with Six Undeveloped Lots

Existing Home on Lot 1



37-21644

Idaho Department of Water Resources

System Diagram



Legend

- Taxlots
- Township/Range
- Sections
- QQ
- Delivery Line
- Stub Outs

Nelson 37-21644



0 0.0125 0.025 0.05 Miles