

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12608

Exam Date: 9/18/2012

1. Current Owner: ROGER LONGPRE
302 ELK CREEK RD
IDAHO CITY ID 83631
(208)392-4514
2. Accompanied by: Roger Longpre
Phone No:
Address:
Relationship to Permit Holder: same

3. SOURCE TRIBUTARY
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: 63-12350, 63-30404

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

GROUND WATER L1 NW1/4NE1/4 Sec. 26, Twp 06N, Rge 05E, B.M.
BOISE County

Method of Determination: Garmin GPS 43.83406, -115.83035

2. PLACE OF USE: DOMESTIC

TwpRge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06N 05E 26		X															
		L 1															

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable. On aerial.
☒ 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.
☒ Aerial Photo Attached (required for irrigation of 10+ acres).
☒ Photo of Diversion and System Attached

<u>4. Well or Diversion</u>	<u>Pump Serial No. or Discharge</u>				
<u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Size</u>
<u>well</u>	<u>unknown</u>	<u>3</u>	<u>unknown</u>	<u>unknown</u>	<u>2"</u>

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

D. FLOW MEASUREMENTS

<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>
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2. Measurements: none taken

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

[1] IDWR reference sheet – EXPECTED FLOWS FOR PIPE DIAMETERS, in closed systems, the flow through a 2" pipe is 0.11 cfs.

[2] Theoretical flow calculation: $z = 85'$ bgs, $\text{psi} = 40$, 3 hp, 70% efficiency

$$\frac{[8.8] [3] [7]}{85 + [40] [2.31]} = \frac{18.48}{177.4} = 0.10 \text{ cfs}$$

Measured Method: no measurements taken.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: not applicable

2. Volume Calculations for Other Uses: Domestic

1] IDWR standard of 0.6 af internal use x 10 homes = 6 af.

2] $V_{dr} = 0.11 \times 365 \times 1.9835 = 79.6$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 6 \text{ AF}$

G. NARRATIVE/REMARKS/COMMENTS

Proof of beneficial use was timely filed and the correct fee paid. I was accompanied on the field exam by applicant Roger Longpre. The permit is for 0.15 cfs for the domestic use and associated irrigation in 10 mobile home or RV hookups in the northeast part of the property. Currently, there are 8 single and double wide trailer homes, 1 empty lot and 1 RV hookup in the permitted place of use. There are no POU overlaps for the place of use covered by this permit but there are two POD overlaps. The overlapping water rights are 65-12350, for the 8 hookups originally developed in the trailer/RV park, and 65-30404, for the Longpre house and yard.

The well was drilled in 1973. The well log is on file with IDWR but the QQ legal description is incorrect. A copy of the well inspection form will be forwarded to IDWR staff to correct this error. The well is 250 feet deep and has a diameter of 4 inches. During development of this permit, the applicant replaced the pump with a 5 hp pump, which

proved to be too powerful, so he has a 3 hp submersible pump installed and that was the pump he said was in place during the exam. He looked in his files while I was there but could not find pump information. The original pump was 2 hp.

From the well, a 2" steel pipe pumps water to 2 pressure tanks, then to a 2" black plastic mainline to the individual

Narrative – continued from page 2

lots. The pump turns on at 40 psi and turns off at 70 psi. Mr. Longpre has measured the depth to water at different times when the pump was pulled and said the static water level was 14 feet below ground level and 60 feet below ground level. There is no information regarding static or pumping levels on the well log or at what depth the pump was installed. The well casing was perforated at 3 intervals, the shallowest being from 104 feet to 168 feet.

Water is not used for irrigation. The IDWR reference graph for domestic use states that 0.15 cfs is needed for the internal use in 10 homes. The IDWR reference for pipe flows indicated that the maximum flow through a 2 inch pipe is 0.11 cfs. I calculated a theoretical flow, using a Z value of 85 feet, about 20 feet above the first set of perforations, and a pressure of 40 psi. The result was 0.10 cfs.

These results are less than 75% of the permitted rate. I recommend that the license be issued for 0.11 cfs, which is the full pipe rate for a 2 inch pipe in a closed pressurized system, and the midrange value that I obtained from the various calculations and reference materials.

I recommend an annual volume of 6 af, which is based on the IDWR reference graph of 0.6 af for internal domestic per home for 10 homes. This volume is the lesser of the Vir and Vdr calculations.

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

Remove 071 because the volume has been calculated.

Add E52 - The rights listed below are limited to a total combined diversion rate of 0.11 cfs. Combined Right Nos.: 65-12350, 65-30404 and 65-12608.

Add F06 - The following rights are diverted through point(s) of diversion described above: 65-12350, 65-30404 and 65-12608.

H. RECOMMENDATIONS

- | | |
|-------------------------|-----------------|
| 1) Permit amount | <u>0.15</u> cfs |
| 2) Beneficial use limit | <u>0.15</u> cfs |
| 3) System measurement | <u>0.11</u> cfs |
| 4) Proof fee amount | <u>0.20</u> cfs |

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	0.110 CFS	6 AF
<u>Totals:</u>		0.110 CFS	6 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 Wing M. McC Date 10-19-12

Reviewer _____ Date _____



63-12608 - 2011 Bing photography. Place of use outlined in light blue. The 10 water trailer or RV hookups to be licensed are denoted by the "T" or "RV"



The pump house behind the Longpre main house.



The well and associated piping. One of the blue pressure tanks seen.



Looking west at place of use from the east end of the place of use.



Looking east in place of use.

4/2011

IDAHO DEPARTMENT OF WATER RESOURCES
FIELD EXAMINERS
WELL INSPECTION FORM

1. IDENTIFICATION # _____ (Tag #, etc.)

OTHER APPLICABLE # 63-12608 (Water right #, etc.)

2. OWNER Robert L. Lunde Phone 392-4514

Address 302 Elk Creek Rd City ID City

State ID Zip 83631 Email _____

3. WELL LOCATION (GPS required in Degrees Decimal Minutes – use PLS if GPS not available)

Lat. 43.83419 Long. -115.83047

Twp _____ Rge _____ Sec _____ 1/4 _____ 1/4 _____

4. WELL CONSTRUCTION ☒ Well log attached ☐ Well log not found

Any obvious construction problems that may be a source for contamination or waste? ☐ Yes ☒ No

If yes, describe below &/or see attached (list any that apply): ☐ Photos ☐ Diagram ☐ Other

5. HYDROLOGIC INFORMATION - no meas taken

Static water if measured _____ ft. Water temperature if measured _____ °F

Flowing artesian ☐ Yes ☐ No Pressure if measured _____ psi

* NOTES

well 106 - legal description is wrong.
well is in the ~~NE~~ NWNE sec 26, T6N, R5E

INSPECTED BY

Wendy Chubb

DATE

9-18-12

CC: MP

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

Received
12-17-73
10:10 AM
JND

1. WELL OWNER
Name Milton Sparks
Address Idaho City
Owner's Permit No. _____

2. NATURE OF WORK
☒ New well
☐ Deepened
☐ Replacement
☐ Abandoned (describe method of abandoning)

3. PROPOSED USE
☐ Domestic
☐ Irrigation
☐ Test
☒ Municipal
☐ Industrial
☐ Stock

4. METHOD DRILLED
☒ Cable
☐ Rotary
☐ Dug
☐ Other

5. WELL CONSTRUCTION
Diameter of hole 8 inches
Total depth 250 feet
Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>2.50</u> inches	<u>8</u> inches	<u>3</u> feet	<u>40</u> feet
<u>2.50</u> inches	<u>5</u> inches	<u>18</u> feet	<u>104</u> feet
<u>2.50</u> inches	<u>5</u> inches	<u>111</u> feet	<u>132</u> feet
<u>2.50</u> inches	<u>5</u> inches	<u>139</u> feet	<u>160</u> feet
<u>2.50</u> inches	<u>5</u> inches	<u>166</u> feet	<u>187</u> feet

Was a packer or seal used? ☒ Yes ☐ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☒ Torch
Size of perforation 0.4 inches by 4 inches

Number	From	To
<u>168</u> perforations	<u>104</u> feet	<u>110</u> feet
<u>168</u> perforations	<u>132</u> feet	<u>139</u> feet
<u>144</u> perforations	<u>160</u> feet	<u>166</u> feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter _____ Slot size _____ Set from _____ feet to _____ feet
Diameter _____ Slot size _____ Set from _____ feet to _____ feet
Gravel packed? ☒ Yes ☐ No Size of gravel #40
Placed from 0 feet to 250 feet
Surface seal? ☒ Yes ☐ No To what depth 40 feet
Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL
Sketch map location must agree with written location.
County Boise
NE 1/4 NW 1/4 Sec. 26, T. 6 N., R. 5 E.

7. WATER LEVEL
Static water level _____ feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA
☒ Pump ☐ Bailor ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>20</u>		<u>6</u>

9. LITHOLOGIC LOG

39410

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
<u>8</u>	<u>0</u>	<u>25</u>	<u>Goldhill tailings</u>	☒	☐
<u>8</u>	<u>25</u>	<u>33</u>	<u>Blue Sandy Clay</u>	☐	☐
<u>8</u>	<u>33</u>	<u>43</u>	<u>sand and gravel</u>	☐	☐
<u>8</u>	<u>43</u>	<u>51</u>	<u>Blue Sandy Clay</u>	☐	☐
<u>8</u>	<u>51</u>	<u>95</u>	<u>Brown</u>	☐	☐
<u>8</u>	<u>95</u>	<u>108</u>	<u>Brown Sandy Clay</u>	☐	☐
<u>8</u>	<u>108</u>	<u>109</u>	<u>sand</u>	☐	☐
<u>8</u>	<u>109</u>	<u>145</u>	<u>Blue Sandy Clay</u>	☐	☐
<u>8</u>	<u>145</u>	<u>165</u>	<u>Causing Brown Sandy Clay</u>	☐	☐
<u>8</u>	<u>165</u>	<u>174</u>	<u>Blue Sandy Clay</u>	☐	☐
<u>8</u>	<u>174</u>	<u>193</u>	<u>White Sandy Clay</u>	☐	☐
<u>8</u>	<u>193</u>	<u>208</u>	<u>Blue</u>	☐	☐
<u>8</u>	<u>208</u>	<u>215</u>	<u>Brown sandy clay</u>	☐	☐
<u>8</u>	<u>215</u>	<u>233</u>	<u>Blue</u>	☐	☐
<u>8</u>	<u>233</u>	<u>240</u>	<u>Brown Sandy clay</u>	☐	☐
<u>8</u>	<u>240</u>		<u>Blue</u>	☐	☐

10. Work started July 25-77 finished Aug 20-77

11. DRILLER'S CERTIFICATION
This well was drilled under my supervision and this report is true to the best of my knowledge.

Engleman Well Drill. 47

Driller's or Firm's Name _____ Number _____
Address 1309 Sand-Boise, Idaho
Signed by Engleman Sept 1-73 Date _____

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

[illegible]

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT