

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8652

Exam Date: 10/29/2012

1. Current Owner: DAVID A BELL
PO BOX 13
KETCHUM ID 83340-0013
(208)726-3463

2. Accompanied by: NA (in-house field exam)

3. SOURCE
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-14260 (domestic/stockwater)-not significant
2. Other water rights with the same point of diversion: 37-14260

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**GROUND WATER L4 NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 5, Twp 03N, Rge 18E, B.M. BLAINE County

Method of Determination: verified with permit holder

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03N	18E	5																	1.8

Total Acres: 1.8

Method of Determination: verification with permit holder

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable. **(PROVIDED BY MR. BELL)**
☒ 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).
☐ NA 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>
D0060570		1 1/2			

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>
NA—remote field examination completed. Will calculate diversion rate based on hp equation						

2. Measurements: NA

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

110' = depth to water based on 1968 well driller's report (a new well was drilled in 2011 as the original well went dry according to Mr. Bell)

1.5 = horsepower of pump based on statement in application

40 = psi based on standard pressure for this type of system

$$8.8 \times 1.5 \times 0.7 / 110 + (2.31 \times 40) = 9.24 / 202.4 = 0.05 \text{ cfs}$$

Secondary check: 1 ¼ pipe size when designed at 5 fps the expected flows = $Q = 5 \pi r^2$ or

$$5 \times 3.1416 \times 0.052^2 = 0.04 \text{ cfs}$$

Conclusion: The two estimates are close enough to the full permitted rate of 0.05 cfs for irrigation purposes and should carry to the license.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.8 \times 3.5 = 6.3 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05 \times 1.9835 \times 200 \text{ days} = 19.8 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 6.3 \text{ af}$$

2. Volume Calculations for Other Uses: NA

G. NARRATIVE/REMARKS/COMMENTS

I am recommending that this right be approved for irrigation purposes only. Domestic use has been claimed in the SRBA with a priority date of 1968 (date the 1st well was drilled) and was decreed in 2001. Mr. Bell has provided information regarding his system so an "in-office" field exam be completed. It appears that we have sufficient information to license this right with 1.8 acres of irrigation.

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>
IRRIGATION	4/15 to 10/31	0.050 CFS	6.3 AF
<u>Totals:</u>		0.050 CFS	6.3 AFA

2. Recommended Amendments

____ Change P.D. as reflected above ____ Add P.D. as reflected above ☒ None

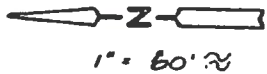
____ Change P.U. as reflected above ____ Add P.U. as reflected above ____ Other

I. AUTHENTICATION

Field Examiner's Name Cherie Palmer Date 10/29/12

Reviewer _____ Date _____

IDWR
 Dave Bell Permit 37-8652
 10 Hangar Road P.O. Box 13
 Blaine Co. Ketchum, ID 83340



1.5 HP pump

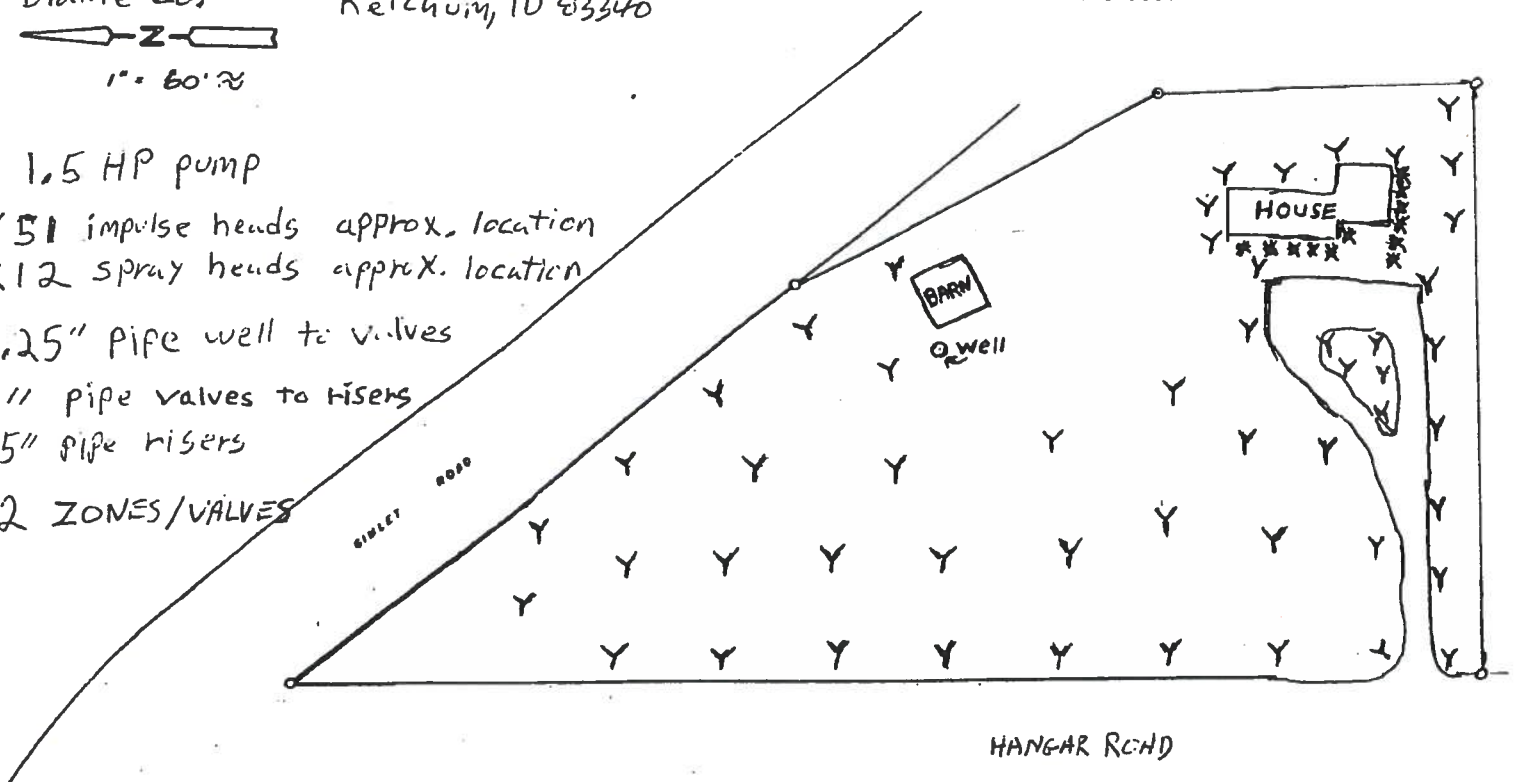
Y51 impulse heads approx. location
 X12 spray heads approx. location

1.25" pipe well to valves

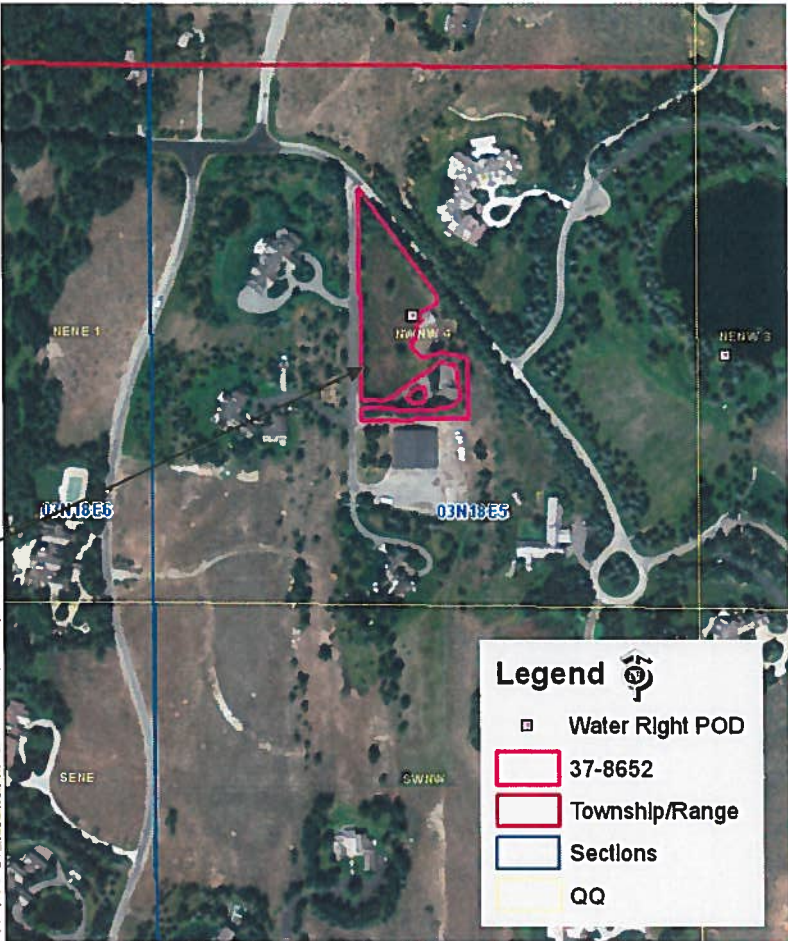
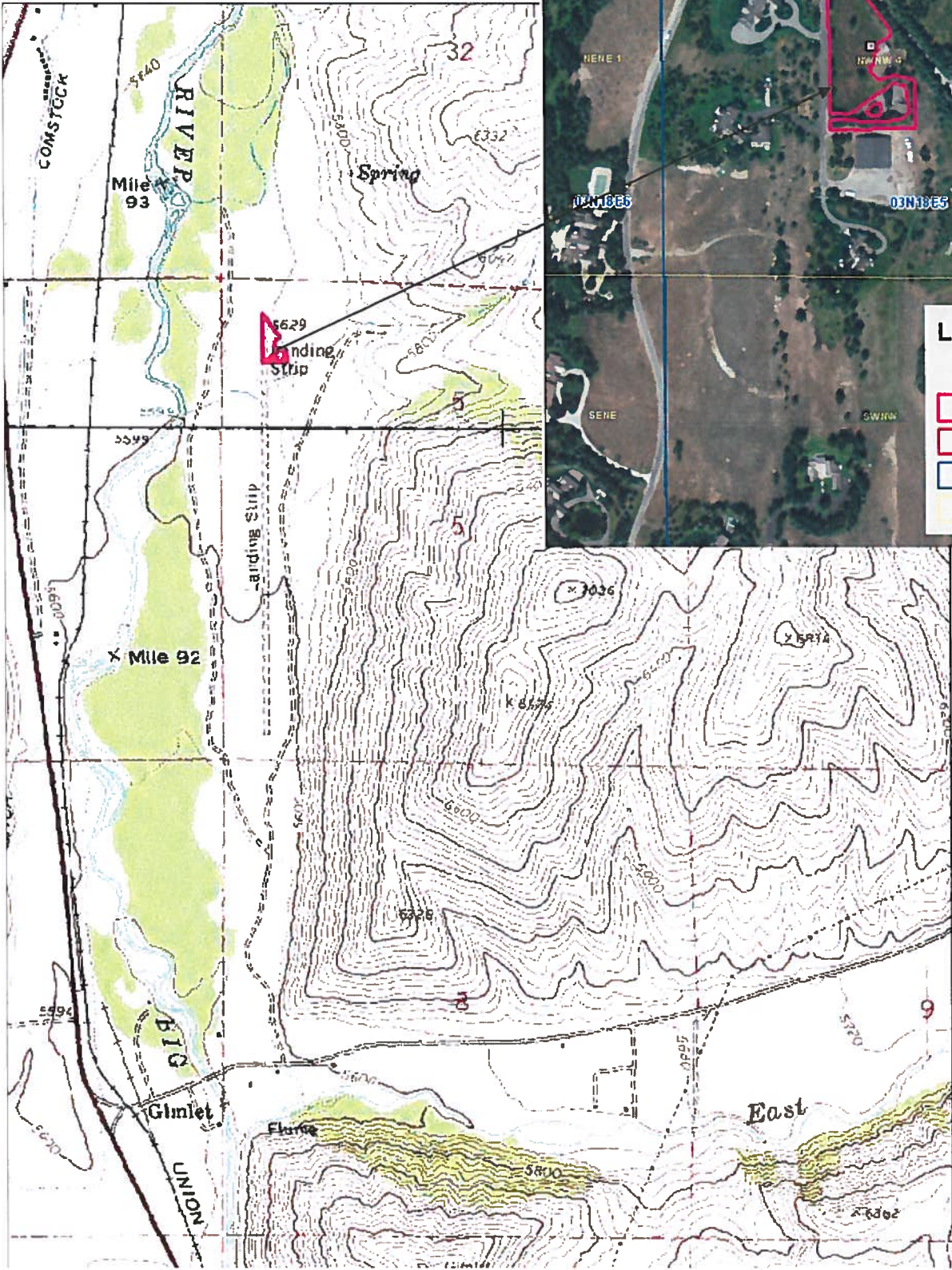
1" pipe valves to risers

.5" pipe risers

12 ZONES/VALVES



- completed by Mr. Bell



Palmer, Cherie

From: Dave Bell [dabell@juno.com]
Sent: Friday, October 26, 2012 2:00 PM
To: Palmer, Cherie
Subject: Re: Water Right 37-8652 Map
Attachments: Permit 37-8652 Dave Bell.pdf

Hi Cherie,

I had trouble trying to draw on your images. Will the attached drawing work? I hope the description of the piping works. I don't know exactly where the pipe sizes change. The pipe starts at the well with 1 1/4" to the house, then to 1 1/8" then to 1" around the valves to 1/2" at each head. There are about 5 heads per zone, some have more and some less with different sized nozzles to balance the flow.

Let me know if you need something else. Have a good weekend.
Dave Bell 37-8652

From: "Palmer, Cherie" <Cherie.Palmer@idwr.idaho.gov>
To: <dabell@juno.com>
Subject: Water Right 37-8652 Map
Date: Fri, 19 Oct 2012 14:46:21 -0600

Hi David,

It was a pleasure to speak with you on the phone today. I hope to complete your water right license with the information that has already been collected regarding your system but, I will need a few more things. I have attached two maps for your use (one close up and one zoomed out—use whichever is the best). Please mark on the map where your sprinkler lines are located and where the sprinklers are located. Also, if you could include sprinkler type, pipe size, and anything else that would be helpful. Thank you for your help and I look forward to finalizing your water right license.

<<map.jpg>> <<map2.jpg>>

Cherie Palmer, Sr. Water Resource Agent
Idaho Dept of Water Resources
Water Allocation Bureau
322 E. Front Street (Front St. & Broadway Ave)
Mail: PO BOX 83720

Boise, ID 83720-0098
email: cherie.palmer@idwr.idaho.gov

phone: (208) 287-4944
fax: (208) 287-6700

REPORT OF WELL DRILLER
State of Idaho

RECEIVED

OCT 29 1968

State law requires that this report shall be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

WELL OWNER:

Name Lawrence Johnson

Address Hailley Idaho

Owner's Permit No. _____

NATURE OF WORK (check): Replacement well ☐

New well ☒ Deepened ☐ Abandoned ☐

Water is to be used for: _____

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒

Dug ☐ Other _____

(explain)

CASING SCHEDULE: Threaded _____ Welded ☒

6 "Diam. from 1 ft. to above 3.3m

"Diam. from _____ ft. to 5.2-5.4

"Diam. from _____ ft. to _____ ft.

"Diam. from _____ ft. to _____ ft.

Thickness of casing: 250 Material: _____

Steel ☒ concrete ☐ wood ☐ other ☐

(explain)

PERFORATED? Yes ☐ No ☒ Type of

perforator used: _____

Size of perforations: " by "

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

perforations from _____ ft. to _____ ft.

WAS SCREEN INSTALLED? Yes ☐ No ☐

Manufacturer's name _____

Type _____ Model No. _____

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

CONSTRUCTION: Well gravel packed? Yes ☐

No. ☒ size of gravel _____ Gravel

placed from _____ ft. to _____ ft. Surface seal

provided? Yes ☒ No ☐ To what depth?

_____ ft. Material used in seal: _____

Did any strata contain unusable water? Yes ☐

No. ☒ Type of water: _____

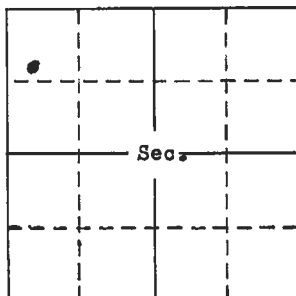
Depth of strata _____ ft. Method of sealing

strata off: _____

Surface casing used? Yes ☒ No. ☐

Cemented in place? Yes ☐ No ☒

Locate well in section



LOCATION OF WELL: County Blaine

NW 1/4 Sec. 5 T. 3 N. 8 R. 18 E. 4

Use other side for additional remarks

Size of drilled hole: 6 Total

depth of well: 125 Standing water

level below ground: 25 Temp. _____

Fahr. _____ Test delivery: 20 gpm

or _____ cfs Pump? ☒ Bail ☐

Size of pump and motor used to make test: _____

3/4 H.P. 3-1/2

Length of time of test: 5 Hrs. _____ Min.

Drawdown: 34 ft. Artesian pressure: _____ ft.

above land surface _____ Give flow _____ cfs

or _____ gpm. Shutoff pressure: _____

Controlled by: Valve ☐ Cap ☐ Plug ☐

No control ☐ Does well leak around casing?

Yes ☐ No ☐

DEPTH MATERIAL WATER

FROM TO YES OR NO

FEET FEET

0 3 Top soil no

3 32 Gravel + Boulders no

32 36 Cement Gravel no

36 44 Gravel (2 H.P. in) yes

44 47 Brn. Clay no

47 58 Cement Gravel no

58 66 Decomposed Granite no

66 105 Heavy Shale, Hard no

105 107 Soft produced 9 H.P. in yes

107 123 Hard Grey Shale no

123 125 Soft clay mud (Clay) yes

in Crack yes

Work started: 9-10-68

Work finished: 9-17-68

Well Driller's Statement: This well was drilled under my supervision and this report is true to the best of my knowledge.

Name: Geo. Prosser

Address: Shoshone Idaho

Signed by: Geo. Prosser

License No. 19 Date: 10-25-68

USGS

