

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 47-7904

Exam Date: 8/6/1992

1. Current Owner: LAVAR BLOXHAM
RT 1 BOX 5
BUHL ID 83316
(208)543-4430
2. Accompanied by: Lavar Bloxham
Address: Rt 1 Box 5, Buhl, ID 83316
Relationship to Permit Holder: Current Owner

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: N/A
2. Other water rights with the same point of diversion: N/A

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE1/4SE1/4 Sec. 22, Twp 09S, Rge 14E, B.M.
TWIN FALLS County

Method of Determination: Garmin GPSmap 76S; Manually Entered into ESRI ArcMap.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
09S	14E	22																4.0	4.0

Total Acres: 4

Method of Determination:

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>
	Franklin	1.5	2823007102	N/A	N/A

*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>
Theoretical	N/A	N/A	N/A	N/A	N/A	N/A

2. Measurements: Theoretical

E. FLOW CALCULATIONS Additional Computation Sheets Attached

Flow calculations were based on observations made during a field examination that was made in 1992 by Brian Block.

Measured Method: Brake Horsepower Flow EquationWhere $Q = \frac{C \times BHP \times PE}{DPD \times PP}$

Q = Flow in CFS

C = Constant of Conversion = 8.8 (1 CFS water w/8.8 ft of head = 1 theoretical unit of HP)

BHP = Brake Horse Power of Pump = 1.5 HP

PE = Pump Efficiency = 70% (0.7)

DPD = Dynamic Pumping Depth = 115 ft

PP = Pumping Pressure (ft) = 22 psi x 2.31 ft/psi = 50.82 ft

$$Q = (8.8 \times 1.5 \times 0.7) / (115 + 50.82) = 0.06 \text{ CFS}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.0 \times 4.0 = 16 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.06 \times 214 \times 1.9835 = 25.5 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 16 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

Original field examination was performed by Brian Block on August 7, 1992, accompanied by the Lavar Bloxham (Current Owner). A follow-up exam was performed by Jeff Cooper & Corey Skinner (IDWR) along with the neighbor &/or current land owner Rocky Bartlett. The original exam found a 1.5 HP Franklin Pump on a well, apparently drilled in 1978, located in TWP 09S 14E Sec. 22 NESE, diverting to a 1500-gallon storage tank in order to drip-irrigate approximately 4.0 acres of ground including trees. The 1992 field exam included a diagram of the location of the well, storage tank, & irrigated area but did not include a map. The purpose of the 2012 exam was to more accurately identify the location of the well and irrigated grounds along with providing photos documenting the development. In addition, the 1992 exam did not include or mention the development of a Domestic component to the right.

The most recent field exam found evidence of approximately 4.0 acres of irrigation. Pipe, valves, and other infrastructure were evident in addition to the trees which had been likely established during the development period. A dwelling had been constructed to the south of the well, but it appeared to be of relatively recent construction. According to the Proof of Beneficial Use, filed by the permit holder on May 28, 1992, zero households had been constructed during the development period. The dwelling observed during the 2012 field exam could not be identified using the 1992 imagery available the Department. Because of this, the domestic component of the permit was not included in the license.

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	04/01 to 10/31	0.060 CFS	16.00 AF
<u>Totals:</u>		0.060 CFS	16.00 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: J. Cooper

Date: 08/21/2012

Reviewer: 

Date: 8/23/12

To: 47-7904 File
From: Jeff Cooper
Date: 8/22/2012
Re: Field Examination Photos & Map



Figure 1: Polypipe used in the irrigation system. Located on the NE edge of the property.



Figure 2: PVC used in the irrigation system. Located SE of the well.



Figure 3: Well (6") used to supply water to the irrigation system.



Figure 4: Irrigation infrastructure leading off from the well to the NE of the property.

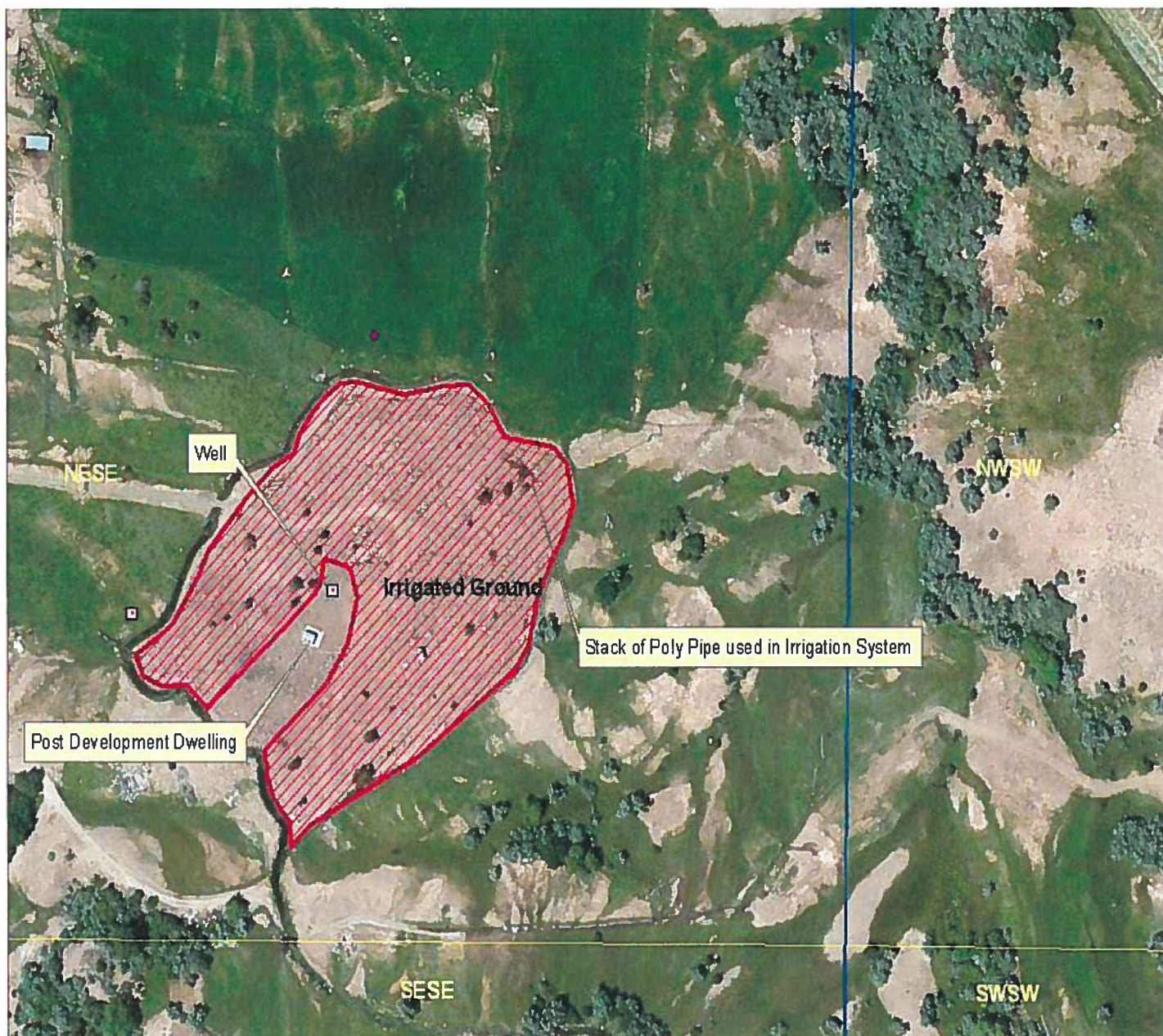


Figure 5: Map of the POU & POD. (Bing Imagery, 2011)

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 47-7904

1. Owner: Lavar Bloxham Phone No. 543-4430

Current Address: Pt. 1 Box 5 Buhl, 83316

2. Accompanied by: owner EXAM. DATE: 6-12-92

Address: _____ Phone No. 543-4430

Relationship to Permit Holder: _____

3. Source: groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with same place of use: none

☐ Copies Attached

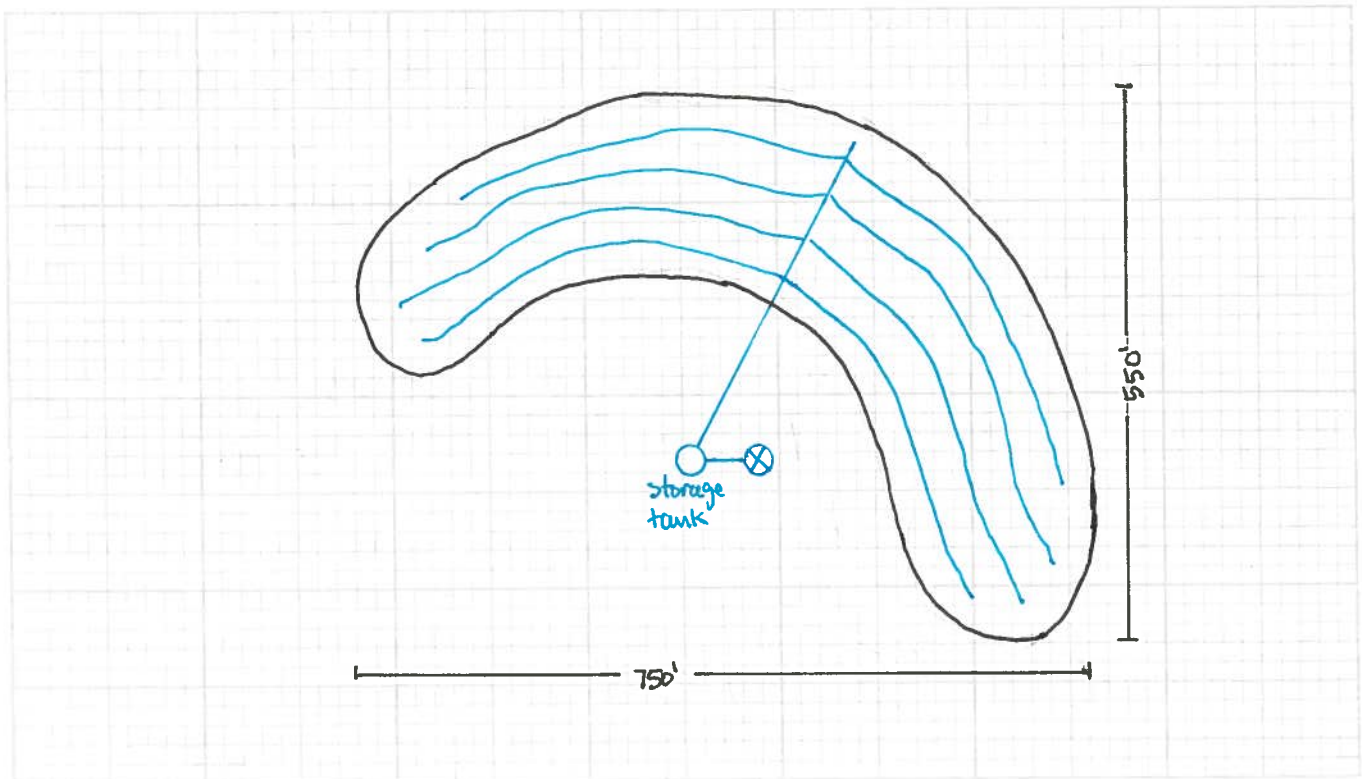
2. Other water rights with same point of diversion: none

☐ Copies Attached

☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



Scale: 1" = 200'

2. ☒ Copy of U.S.G.S. Quadrangle Attached
Showing location(s) of point(s) of diversion and
place(s) of use (required).

☒ Photo of Diversion and System Attached

(required for all but single household domestic groundwater, and stockwater.

☐ Aerial Photo Attached
(required for irrigation of 10 acres or more).

System Description (continued)

3. **Narrative:** Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

Well diverts water to 1500 gal. storage tank
to drip-irrigation system for trees.

☐ See Remarks on page 4 for continuation

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	Franklin	1.5	282 3007 102		

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

5. **Point(s) of Diversion:**

Ident. No.	Gov't. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
			NE	SE	22	9S	14E	Twin Falls	Aquad map / insp.

6. **Place(s) of Use:**

Indicate Method of Determination _____

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
9S	14E	22													4				4

Do not use this space

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method: ~~WP~~

$$\frac{8.8 (1.5) (1.7)}{115 + (22 \times 2.31)} = 0.06 \text{ cfs.}$$

efficiency
depth *pressure conversion*

2. Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)

Total Head: (1) + (2) = _____ (3)

; Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)

Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)

Meter Input HP: (6) x 1.34 = _____ (7)

Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Amps x .001732 = _____ (6)

Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4 (4.0) = 16.0$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 0.06 (214) (1.9835) = 25.4$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 16.0$$

2. Volume Calculations for Other Uses:

H. REMARKS AND OVERLAP REVIEW ANALYSIS

System capacity limits diversion rate.

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
IRRIGATION	4-1	10-31	0.06	16.0
Totals:			0.06	16.0

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

J. AUTHENTICATION

Field Examiner's Name BRIAN W. BLOCK

Signature Brian Block

Certification Date _____

Field Report Preparation Date 8-7-92

CONSULTANT SEAL

- K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

47-7904



P.O.



P.U.
storage
tank