

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-11752

Exam Date: 5/8/2012

1. Current Owner: CYNTHIA ROBERTS
1555 S SOUTHSIDE BLVD
MELBA ID 83641

OR

DONALD J. ROBERTS
1555 S SOUTHSIDE BLVD
MELBA ID 83641
(208) 495-2311

2. Accompanied by: Donald Roberts and Glen O Dell

Phone No: same

Address: same

Relationship to Permit Holder: current owner and original owner

3. SOURCE

TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Boise Kuna canal shares and 63-27051 (waste water) partial O/L
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

NE1/4SW1/4

Sec. 12, Twp 01S, Rge 02W, B.M.

CANYON County

Method of Determination: GPS and ArcMap

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
01S	02W	12	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
											26.0	33.0							59.0

Total Acres: 59

Method of Determination: Field exam and ArcMap

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.

Well or Diversion

<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 Size</u>
Submersible		20	unk		6" discharge

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment

<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>

2. Measurements:

Original owner thought that it produced approximately 55" or 1.10 cfs.

$$\frac{(20) \text{ Hp} \times 8.8 \times 0.7}{(10) \text{ PSI} \times 2.31 + 115 \text{ ft}} = 0.89 \text{ cfs}$$

Permit Rate (irr) = 1.54 cfs
 Proof Pd (\$125.00) (max cfs) = 2.00 cfs
 Found POU acres 59 * 0.02 cfs/ac = 1.18 cfs

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 59 \text{ ac} \times 4.5 = 265.5 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.89 \text{ cfs} \times 260 \text{ days} \times 1.985 = 458.2 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 265.5 \text{ afa}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

Information is based upon a field exam conducted May 8, 2012. I met with Glen O Dell and Donald Roberts. Rick Collingwood (for the department) also assisted in the field examination.

The system is associated with a well located roughly within the center of the found POU. A buried 10" mainline goes east (up hill) to three risers where it is tapped to deliver water via gated pipe or siphon tube from cement ditches to flood irrigate the various fields on the east side of the POU. One field to the west central is being converted to a pump system and wheel line irrigation. Another line goes south from the well to gated pipe to irrigate a portion of the southwest field. The balance of the field is irrigated via cement ditch and siphon tubes. The well water can also be dumped into the ponds associated with the waste water and then delivered to the northwest field again via cement ditch and siphon tubes. There is a horse pasture north of the well that is fenced and also includes the two waste water settlement ponds that is irrigated.

Just north and west of the well is an un-irrigated area of approximately 1.5 acres. That area is used for equipment storage, stack yards, and the settlement ponds.

On the west side of the property four lots were developed and gifted or sold. The lots are approximately 165 ft wide and cover the full length of the NWSW. They are not a part of the found POU for this right. There are also 3 lots developed in the SE corner of the NESW around the original farmstead. None of those lots utilize water from this system. The system capacity for the well is not sufficient to provide a full inch per acre. I found 59 acres which would equate to 1.18 cfs at one inch per acre. Glen O Dell thought that it produced around 55" or 1.10 cfs. I did a theoretical calculation based upon 20HP, 10 PSI for open discharge, and a dynamic level of 115 ft as identified by Glen. That calculation provided a rate of 0.89 cfs (the ultimate recommendation).

The found place of use is also fully irrigated with canal water and a portion of the POU is also irrigated with waste water (63-27051).

The permit was conditioned to have a measurement device installed or utilize power records and report annually. We discussed the system and that no device is installed. I visited with Steve Lester regarding the comments and we decided that they should be modified to 01M.

Have conditions of permit approval been met? ☒ Yes ☐ No (if modified)

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	0.890 CFS	265.50 AF
	<u>Totals:</u>	0.890 CFS	265.50 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 Kelly K. Christensen Date 5-23-12

Reviewer _____ Date _____

63-11752

5-8-2012 field exam

Photo set looking west northwest on left to north on right. Location is approximately 60 ft north of the well and looks across horse pasture and the two ponds.

Small pond

Horse pasture

larger pond

Un-irrigated equip storage area



63-11752

May 8, 2012 Field Visit

8" well

20 HP Sub. Grundfos

55' prod Aprox

discussed rate - theoretical O.K.,

1 pic look north at well

2 pic pan look N NW to N NE across equip lot
and horse pasture. Includes the two ponds.

little pond So. of house in pic big pond by dirt pile

well gps

2295286 > at 12pts (doing qcr reading)
1352923

Point 18

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Agent KKC

2009

Aerial photo date 2011

Twp Rng Sec QQ

1S 02W 12 N 1/2 SW 1/4

Tentative shape = 58 acres

No Gvt lots

orange Boundary
otherwise correct
in →
Gated Pipe

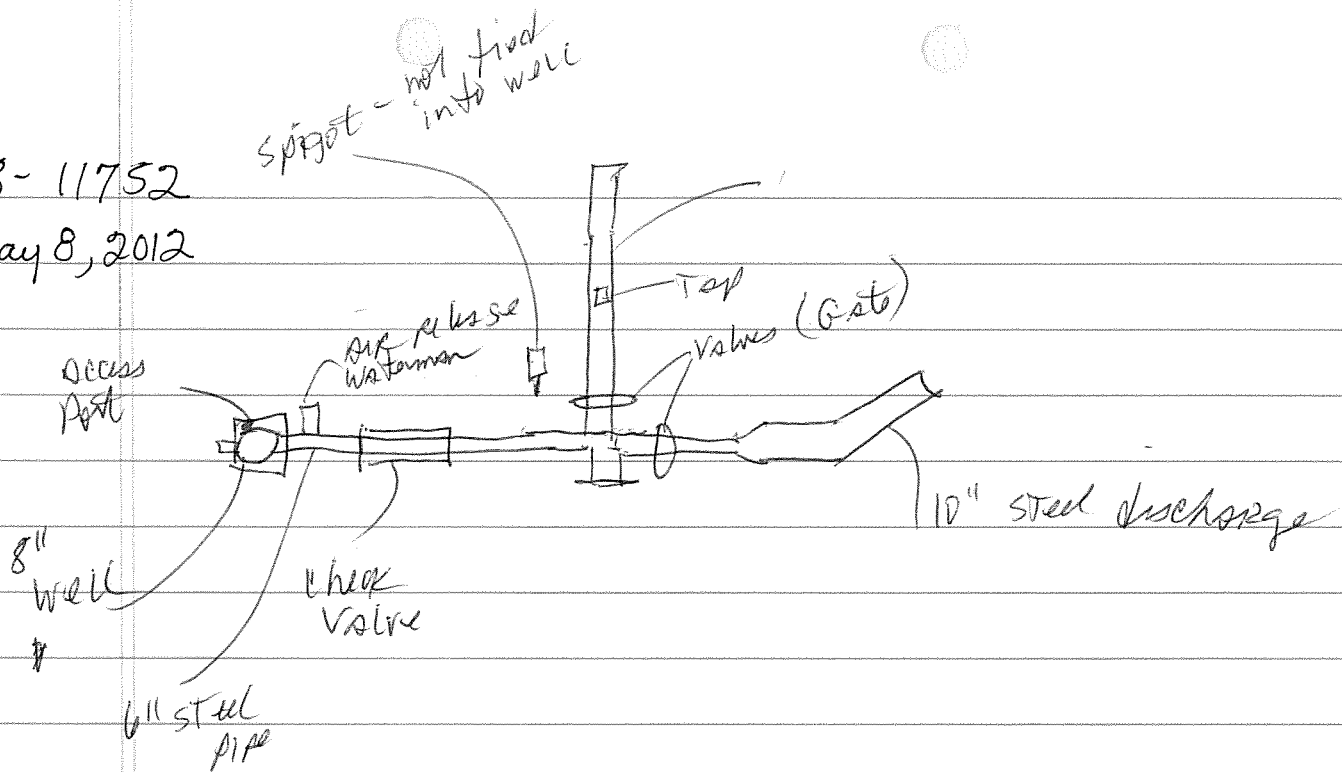


• ~ 24Ac

~ 33ac

57ac total

63-11752
May 8, 2012



Power fob #
015
02W
12
02

Sketch by
Rick Collingwood