

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33087

Exam Date: 10/14/2011

1. Current Owner: WILLOW CREEK RANCH ESTATES #2 SUBDIVISION HOA INC
9650 KEMP RD
MIDDLETON ID 83644
(208)459-8274
2. Accompanied by: Ray Tschohl
Phone No: 724-3059
Address:
Relationship to Permit Holder: : President of Willow Creek Ranch Estate 2 HOA

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: 63-33086 shares the well but has a different pump and system

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

GROUND WATER SE1/4SE1/4 Sec. 28, Twp 05N, 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
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 02W 28																1.0	1.0

Total Acres: 1

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>
	unk	7.5 Hp			

*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						

2. Measurements:

7.55 HP Per Ray Tschohl and well house notes
170 ft max estimated for area per well logs
50 psi per sprinkler system

$$\frac{(7.5) \text{ Hp} * 8.8 * 0.7}{(50) \text{ PSI} * 2.31} + 170 \text{ ft} = 0.16 \text{ cfs}$$

Well tagged D0031701 shows a static water level of 165' is in the same Q/Q. The closest well is well tagged D0048144 with a static water level of 103 ft. Theoretical value greatly exceeds permit limiting value of 0.03 cfs.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:
See D.2 above.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (1 \text{ ac}) \times (4.5 \text{ afa}) = 4.5 \text{ afa}$$

$$V_{D.R.} = [0.03 \text{ cfs}] \times (260 \text{ Days}) \times 1.9835 = 15.4 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 4.5 \text{ afa}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

The system is a well with a submersible pump (7.5HP) tied into a pressure tank system and then to a multiple station (approx 6 stations with 8 heads per station) sprinkler system. The sprinklers are Rainbird 5000s. A second pump and irrigation system shares the well (63-33086, diff POU). The two systems are plumbed together for backup purposes only.

Permit = 0.03 cfs * Recommend

Proof (\$50.00 fee) = up to 0.20 cfs

Found (theoretical)= 0.16 cfs

Complicated history pre-permit. An app for permit was filed and ultimately withdrawn (same for 63-33086). The applications for permit (both) were submitted with an attached well log identifying an 8 inch well. I found a 10 inch well. Unable to find a matching well log for a 10 inch well. Upgrade fees from a domestic well to an irrigation well was paid. Receipt W037031 for \$82.50 for 63-33086 and receipt W037222 for \$82.50 for 63-33087 were paid to cover the necessary upgrade fee.

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	03/01 to 11/15	0.030 CFS	4.5 AFA
<u>Totals:</u>		0.030 CFS	4.5 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 Kelly K. Christensen Date 10-24-11

Reviewer _____ Date _____

Iowa Department of Water Resources
63-33087 FIELD EXAMINATION



0 330 660 1,320
Feet

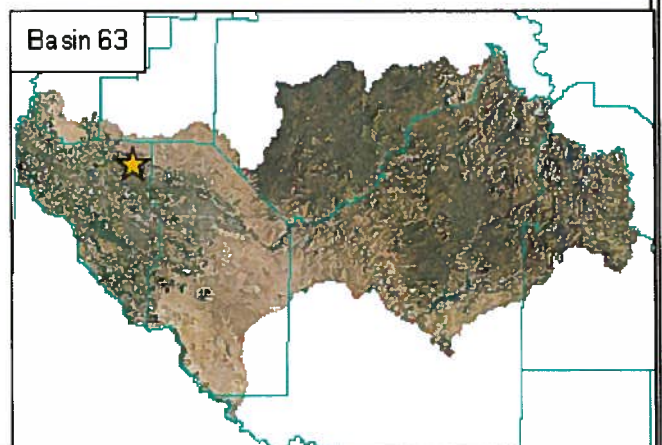
★ LOCATION IN BASIN

PLACE OF USE
TWP 05N, RNG 02W Sec 28
Data Entry on October 24, 2011



- Found point of diversion
- Found place of use
- Township lines
- Section lines
- Quarter/quarter lines

**GIS PLACE OF USE PRESENTATION
2011 AERIAL PHOTOGRAPHY
BY KELLY K CHRISTENSEN**



Permit 63-33086 Willow Creek Ranch Estates HOA Inc
63-33087 Willow Creek Ranch Estates # 2 Subdivision HOA Inc

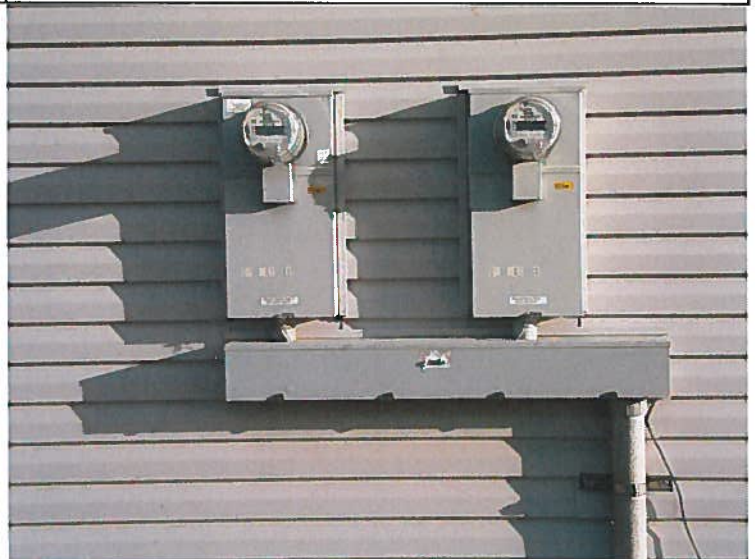
Exam date 10-14-2011

Photo 1 Well house You are looking North in this photo. The well house is north of J R Way just west of Lansing Lane.

Electric feed to meters Well, 10 inch surface casing



Photo 2 Pump meters You are looking North in this photo at the southern wall of the pump house and are looking at the independent meters for each pump in the well for each right.



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Photo 3 Incoming lines from the well You are looking at the north east corner of the well house in this photo. The well house is north of J R Way just west of Lansing Lane.

Incoming lines from well



Photo 4 Independent Pressure tanks You are looking North in this photo at the two pressure tanks. The tanks are not plumbed together.



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Photo 5 Outgoing lines. You are looking west in this photo.
5 HP line going to the POU 7.5 HP line going to POU

Backup valve between the 2 systems chained closed

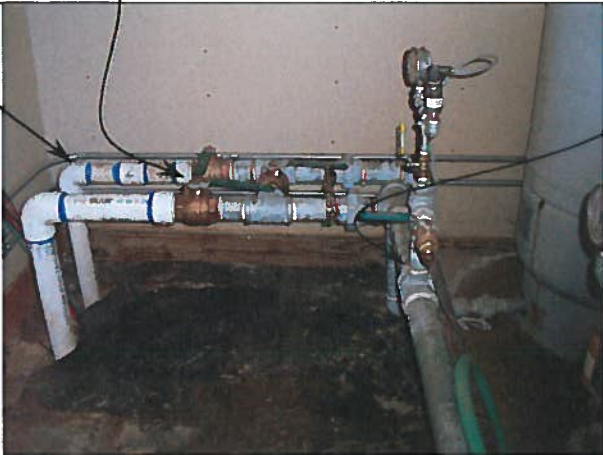


Photo 6 Sprinkler station controls, for both systems.



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Photo 7 Looking south in this photo at the
POU for 63-33086

Lancing Lane J R Way on edge of photo



Photo set 8 Looking northwest on the left to north northwest on
the right. This shows the southern portion of the POU for 63-33086

Purple Sage Rd (POU north of road) Lancing Lane (POU west of road)



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Looking west in this photo at the POU. Photo location is just south of J R Way and west
of Lancing Lane. The well is $\approx$ 100 ft northwest of this location.



63-33086 33087 Willow Cr Subd.
Oct 14-2011 common area

GPS well

43 44.298 #4

116 34,386

Found Rain Bird 5000 head

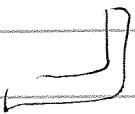
7½ HP - 2 & 3 subd.

5 HP WCR 1.

Surface casing 10"

Per → TSchohl, Ray well off of JR Way
Willow creek 2-3 cfs east west berm

North South - Willow Cr /
Pump 3 & 5 HP?



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Agent RKC

Aerial photo date 2009

Twp Rng Sec QQ

05N 02W 28 SESE



Tax lot information indicates that the common area covers 1.2 acres whereas the permit is for 1 acre.

Shares well with 63-33086.



FIELD EXAM CONVERSATION MEMO

63-33086
 PERMIT # 63-33087 STAFF KKC DATE Oct 7, 2011

(no response from Derlin 10-14-11)
 OWNER OR REP PHONE #? Derlin Goddard 585-3221 goddard29@msn.com

tax lot info indicates that the common area $\approx$ 1.2ac
 Permit is for 1ac.

Try to schedule exam with 63-33085
 P/D of 63-33086 per Ray Tschohl (724-3059) there
 are 2 pumps in the same well. One for each permit Well info should
 be well documented in the well house.

APPOINTMENT DATE/TIME/PLACE

Derlin
 e-mail sent 10-7-11; called 10-13-11 left msg
 With Ray - exam set for 10-14-11. Pump house off of R Way
 He believes that there are 6 stations with rain bird popup
 rotators with 8 heads per station.

The second system is for Willow Ct Sub #1 for the berm
 running n/s then turning west (63-33086)

Ray showed up for exam. Well house was not unlocked.

SYSTEM INFO

Surface Water Ditch System.

Measurement device type _____
 Application method _____
 Delivery system/specifications _____

Surface Water Pump System.

Approx HP _____
 Pump Curve available _____
 Delivery system specifications _____

Ground Water System

Static/Dynamic pumping level _____
 Approx HP _____
 Approx Operating PSI _____
 approx type/number sprinklers used _____

Measurement device type _____
 Pump Curve available _____
 Application method _____
 Delivery system specifications _____

Permit Rate _____

Log doesn't match KKC 10-15-11
 118 static (well log)
 301.5 HP

$$63-33086 \rightarrow \frac{(5) \text{ Hp} \times 8.8 \times 0.7}{(50 \text{ PSI} \times 2.31) + 170} = 0.10 \text{ cfs}$$

$$63-33087 \rightarrow \frac{7.5 \text{ HP} \times 8.8 \times .7}{(50 \text{ PSI} \times 2.31) + 170} = 0.16 \text{ cfs}$$