

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-33085

Exam Date: Oct 14, 2011

1. Current Owner: JUSTIN WALKER
9059 KEMP RD
MIDDLETON ID 83644
(208)859-2932

AUBREY WALKER
9059 KEMP RD
MIDDLETON ID 83644
(208)585-6347
2. Accompanied by: Justin Walker
Phone No:
Address:
Relationship to Permit Holder: Right holder

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: An unrecorded domestic use that includes independent lawn irrigation

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

GROUND WATER NE1/4SE1/4 Sec. 28, Twp 05N, Rge 02W, B.M. CANYON County

Method of Determination: ArcMap and GPS

2.

PLACE OF USE: IRRIGATION

Tw	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				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 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>
	Unk	2 HP			

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

D. FLOW MEASUREMENTS

1.

<u>Measurement 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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Theoretical calculation made

2. Measurements:

Theoretical elements:

2 Hp from permit holder

220 ft depth to water from well log

50 PSI – average of pressure tank system
(40 to 60 psi)

Theoretical calculation

$$\frac{(2) \text{ Hp} * 8.8 * 0.7}{(50) \text{ PSI} * 2.31 + 200 \text{ ft}} = 0.036 \text{ cfs}$$

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

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: N/A

G. NARRATIVE/REMARKS/COMMENTS

The system is a well with an underground line running to the house and pressure tank system. Another underground line Tees off the line between the well and tank and runs south along the west side of the home to a riser about 100 ft south of the home. From there, there is an over the ground poly pipe system to irrigate the southern pasture.

There is no check valve by the pressure tank system therefore all sprinklers are affected by the pressure tank system; therefore all sprinklers are affected by the pressure tank.

There are 9 underground stations with standard popup sprinklers. Each station has 8 heads per line. Operation is one station at a time. The pasture to the south is irrigated via plastic impact rainbirds. Five heads are used at any given time. There is a small area on the west side of the property roughly half way between the north and south end of the lot.

The property and the irrigated ground is in both the NESW and the SESE. The recommendation for this right is for the southern portion of the property thus the domestic lawn irrigation would be around the house.

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	4.50 AF
<u>Totals:</u>		0.030 CFS	4.50 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

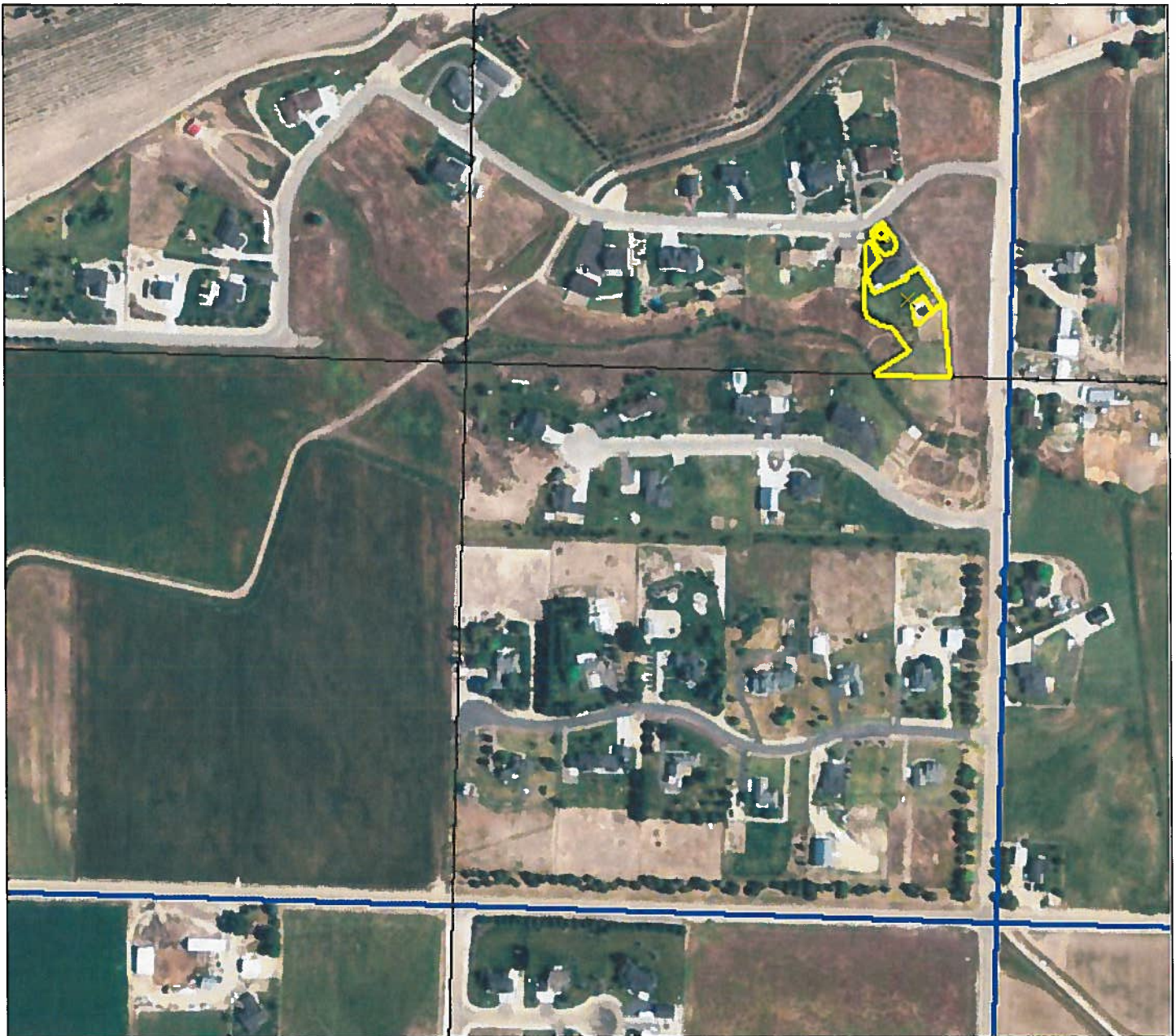
☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name Kelly K. Christensen Date Oct 24, 2011

Reviewer _____ Date _____

Idaho Department of Water Resources
63-33085 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**



FIELD EXAM CONVERSATION MEMO

PERMIT # 63-33085

STAFF

KKC

DATE 10-6-11

OWNER OR REP PHONE #? Justin Walker 859-2932 email jawalker@byu.net
try to coordinate exam with 63-33086, 33087

South end of Lot is within SENE but as tentative shape is drawn the
line is all within NESE att.

APPOINTMENT DATE/TIME/PLACE

e-mail sent 10-7-11

SYSTEM INFO

Surface Water Ditch System.

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

Surface Water Pump System.

Approx HP _____
Pump Curve available _____
Delivery system specifications _____

Ground Water System

Static/Dynamic pumping level 10% static fm well
Approx HP _____
Approx Operating PSI _____
approx type/number sprinklers used _____

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

$$\frac{(2) \text{ Hp} * 8.8 * 0.7}{(50 \text{ PSI} * 2.31) + 2.2 \text{ ft}} = 2.03 \text{ cfs}$$

Permit 63-33085

Photo set 1

Exam date 10-14-2011

You are looking south on the left to northwest on the right. This picture, taken on the eastern side of, shows the southernmost pasture.



Permit 63-33085

Photo set 2

Exam date 10-14-2011

You are looking northwest on the right to north on the right. This picture is a continuation of photo set 1 on the right side of that set. Irrigation line



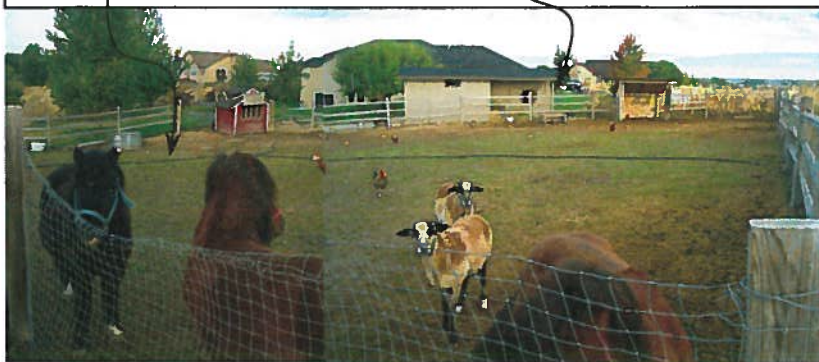
Permit 63-33085

Photo set 3

Exam date 10-14-2011

You are looking north on the right to northwest on the left. This picture shows the small pasture north of the larger pasture. Irrigation line

POD in front yard



Permit 63-33085

Photo set 4

Exam date 10-14-2011

Closeup of the plastic sprinklers used in the pasture.



Permit 63-33085 Photo set 5 Exam date 10-14-2011
You are looking south in this set. This picture set shows the non-irrigated area along the western side of the property. Southern pasture



Permit 63-33085 Photo set 6 Exam date 10-14-2011
You are looking southwest in this photo. The photo was taken from the northeast corner of the property and is looking across the well to the home. Well



Permit # 63-33085 Walker
Exam date 10-14-2011
Agent KKC

Aerial photo date 2009
Twp Rng Sec QQ
5N 02W 28 NESE

Field notes



63-33087 Walker field notes E/and date 10-24-11

1 well common to house & irrigation

Irrigation system splits off before pressure tank system. No check valve on pressure tank system after irrigation leg.

2HP 220ft pump level fm well log.

9 underground auto stations

8 heads per station operate 1 station at a time

Pasture 5 heads at a time operating

43° 44' .405

116 34.429