

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 85-7595

Exam Date: 07/30/2008

1. Current Owner: JACK WALSH
EMMA K WALSH
3702 HILLCREST DR
BOISE ID 83705
(208) 343-7487
2. Accompanied by: Jack and Emma Walsh
Phone No: (208) 343-7487
Address: same as above
Relationship to Permit Holder: same

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: None

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

GROUND WATER SE¼NE¼ Sec. 31, Twp 33N, Rge 04E, B.M. IDAHO County

Method of Determination: GPS, GIS, Satellite Imagery

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<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>	
33N	04E	31				0.9													0.9

Total Acres: 0.9

Method of Determination: Laser Range Finder, GIS, Satellite Imagery

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable. Attachment A.
- X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater. Attachment A
- X Aerial Photo Attached (required for irrigation of 10+ acres). Attachment A.
- X Photo of Diversion and System. Attachment B.

4.

Well or Diversion

ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
N/A					

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

D. FLOW MEASUREMENTS

1.

**Measurement
Equipment**

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Bucket	Plastic	Grainger	N/A	N/A	5.5 gallon	05/05/2008

2. Measurements:

I measured the system discharge by disconnecting one of the drip lines and timing the fill of a 5.5 gallon bucket. After five measurements, the average fill time was 22.8 seconds, with a range from 22.1 to 23.2 seconds. The discharge equates to 14.5 gpm or approximately 0.03 cfs.

$(60 \text{ sec} / 22.8 \text{ sec}) \times 5.5 \text{ gal} = 14.5 \text{ gpm} \rightarrow 45.3 \text{ gpm} / 448.83 \text{ gpm/cfs} = 0.03 \text{ cfs}$

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: NONE

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.9 \text{ ac} \times 3.0 \text{ AF/ac} = 2.7 \text{ AF}$

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 246 \text{ days} \times 1.9835 = 14.6 \text{ AF}$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 2.7 \text{ AF}$

2. Volume Calculations for Other Uses: NONE

G. NARRATIVE/REMARKS/COMMENTS

Permit 85-7595 authorized the use of ground water for irrigation of 15 acres and domestic use for one home. The permit was issued in 1993 and proof was submitted in 1999. The permit condition requiring a flow measurement port was waived by order in 2001.

The well, 50 gallon pressure tank, and controlling works are inside an enclosure adjacent to the irrigated area. The system is operated using a Nelson SmartZone EZ sprinkler control panel. There are six separate stations, each with a 1" diameter pvc drip line. The drip lines have a 1/8" hole at each tree. A garden hose is used to irrigate small areas missed by the drip line system. Prior to operation, the static system pressure was 40 psi. The operating system pressure was 18 psi.

I measured the system discharge by disconnecting one of the drip lines and timing the fill of a 5.5 gallon bucket. After five measurements, the average fill time was 22.8 seconds, with a range from 22.1 to 23.2 seconds. The discharge equates to 14.5 gpm or approximately 0.03 cfs.

Using a laser range finder and satellite imagery, I measured the irrigated area at 0.9 acres. Water is used to irrigate trees and native grasses.

There is no domestic use developed in connection with this permit.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
IRRIGATION	03/15 to 11/15	0.03 CFS	2.7 AF
Totals:		0.03 CFS	2.7 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 Aaron Marshall Date 09/03/2008

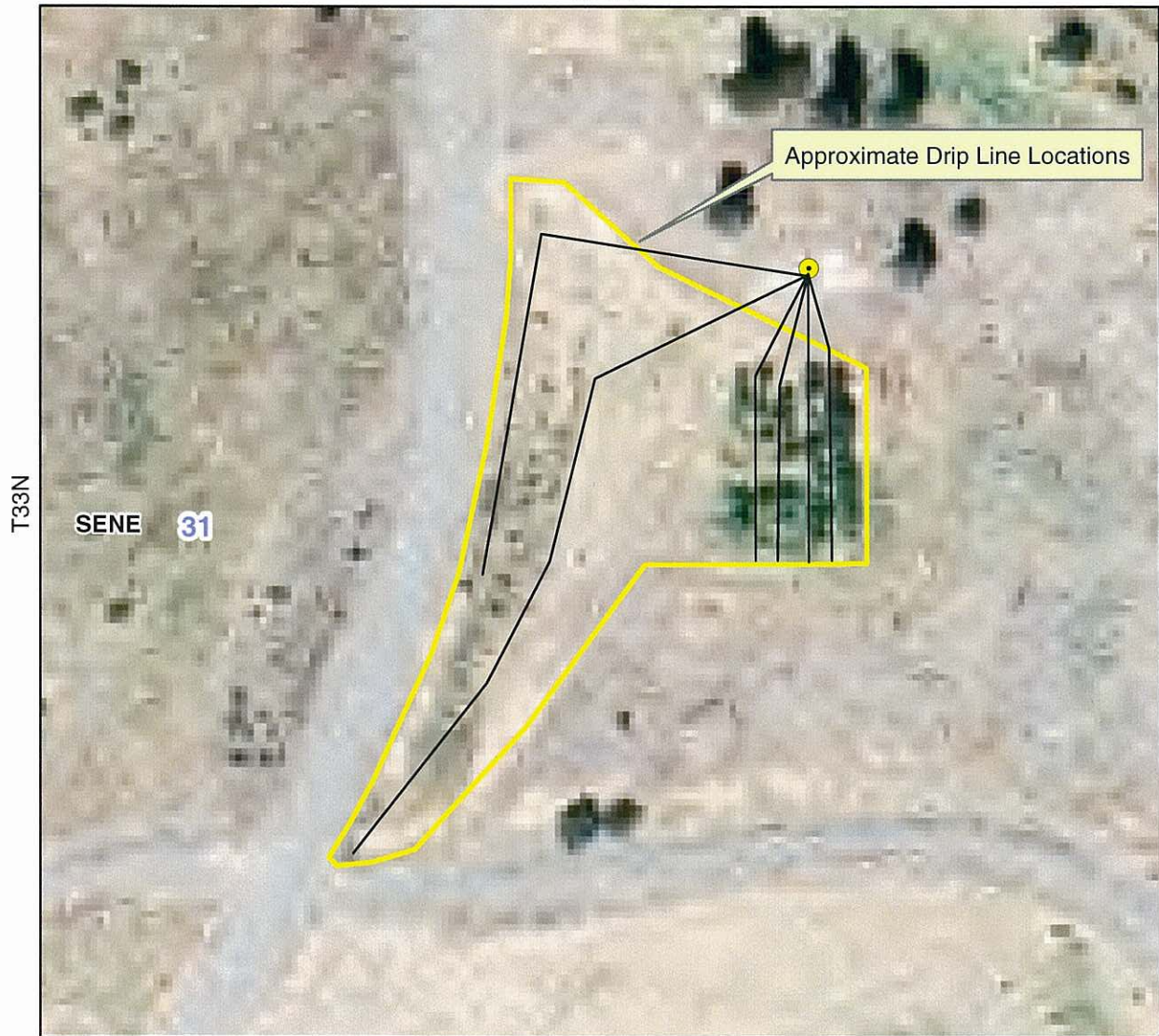
Reviewer _____ Date _____

Beneficial Use Field Report

85-7595

ATTACHMENT A

R04E



Legend

-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters

0 50 100 200 Feet



ATTACHMENT B
PHOTOGRAPHS OF DIVERSION, DELIVERY SYSTEM, AND IRRIGATION



FIGURE 1: Well enclosure and irrigated trees.



FIGURE 2: Well, pressure tank, control panel, spigots.



FIGURE 3: Irrigated area.



FIGURE 4: Irrigated area near road.