

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 36-16646

Exam Date: 8/22/2012

1. Current Owner: MARK E BOLDUC

And/Or

CHRISTINA J BOLDUC
PO BOX 117
HAGERMAN ID 83332
(208)539-6199

2. Accompanied by: Mark Bolduc via telephone

Phone No: 208-539-6199

Address: same

Relationship to Permit Holder: self

3. SOURCE

HOAGLAND TUNNEL

TRIBUTARY

BILLINGSLEY CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 36-16647 and others
2. Other water rights with the same point of diversion: 36-16647 and others

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

HOAGLAND TUNNEL

SE1/4NE1/4SW1/4

Sec. 30, Twp 07S, Rge 14E, B.M.

GOODING County

Method of Determination: IDWR records and spatial data.

2.

PLACE OF USE: COOLING

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>	
07S	13E	36			X														

PLACE OF USE: HEATING

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>	
07S	13E	36			X														

Method of Determination: 2011 aerial photography and taxlot information.

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>
N/A					

*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>
N/A						

2. **Measurements:** A measurement is not required for heating and cooling if diversion rate does not exceed 0.24 cfs according to new Beneficial Use Examination Rules. **Recommended permitted rate of 0.02 cfs.**

E. FLOW CALCULATIONS☐ Additional Computation Sheets Attached

Measured Method:

Permit No: 36-16646

F. VOLUME CALCULATIONS1. Volume Calculations for Irrigation: **N/A**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \text{N/A}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \text{N/A}$$

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

2. Volume Calculations for Other Uses:

$$V = [\text{Diversion Rate (cfs)}] \times (\text{Days of system use}) \times 1.9835 =$$

$$0.02 \text{ cfs} \times 365 \text{ days} \times 1.9835 = 14.47 \text{ AF}$$

Recommended volume 14.5 AF for heating and cooling.

G. NARRATIVE/REMARKS/COMMENTS

Application for permit 36-16646 was filed on July 7, 2008 for the diversion of 0.02 cfs of groundwater (Hoagland Tunnel) for heating and cooling uses associated with one home. Permit 36-16646 was issued on September 11, 2008 and Proof of Beneficial Use was filed on April 28, 2010.

Permit 36-16646 is for heating and cooling uses associated with a home. The system consists of a 20 inch line that carries water from the Hoagland Tunnel for irrigation and domestic uses in the Hagerman area. The applicant takes his irrigation right (36-16647) out of this pipeline at the SE corner of his property through a 4 inch pipe. A ½ HP pump and a 2 inch tap line off the irrigation line divert water to his home through the heating and cooling system and then returns the wastewater to his irrigation pond. Applicant indicated the system runs 365 days a year. (A small amount of water is run through the 20 inch line year round to prevent freezing.)

The permit was approved with a flow rate of 0.02 cfs. A physical measurement is not required for heating and cooling uses if diversion rate does not exceed 0.24 cfs according to new Beneficial Use Examination Rules. **Recommended permitted rate of 0.02 cfs.**

A volume was calculated using the diversion rate, days of system use and IDWR standard 1.9835. **Recommended volume of 14.5 af for heating and cooling uses.**

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>
COOLING	01/01 to 12/31	0.020 CFS	14.50 AF
HEATING	01/01 to 12/31	0.020 CFS	14.50 AF
<u>Totals:</u>		0.020 CFS	14.50 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 Sara Beeder Date 9/13/12

Reviewer [Signature] Date 9/13/12

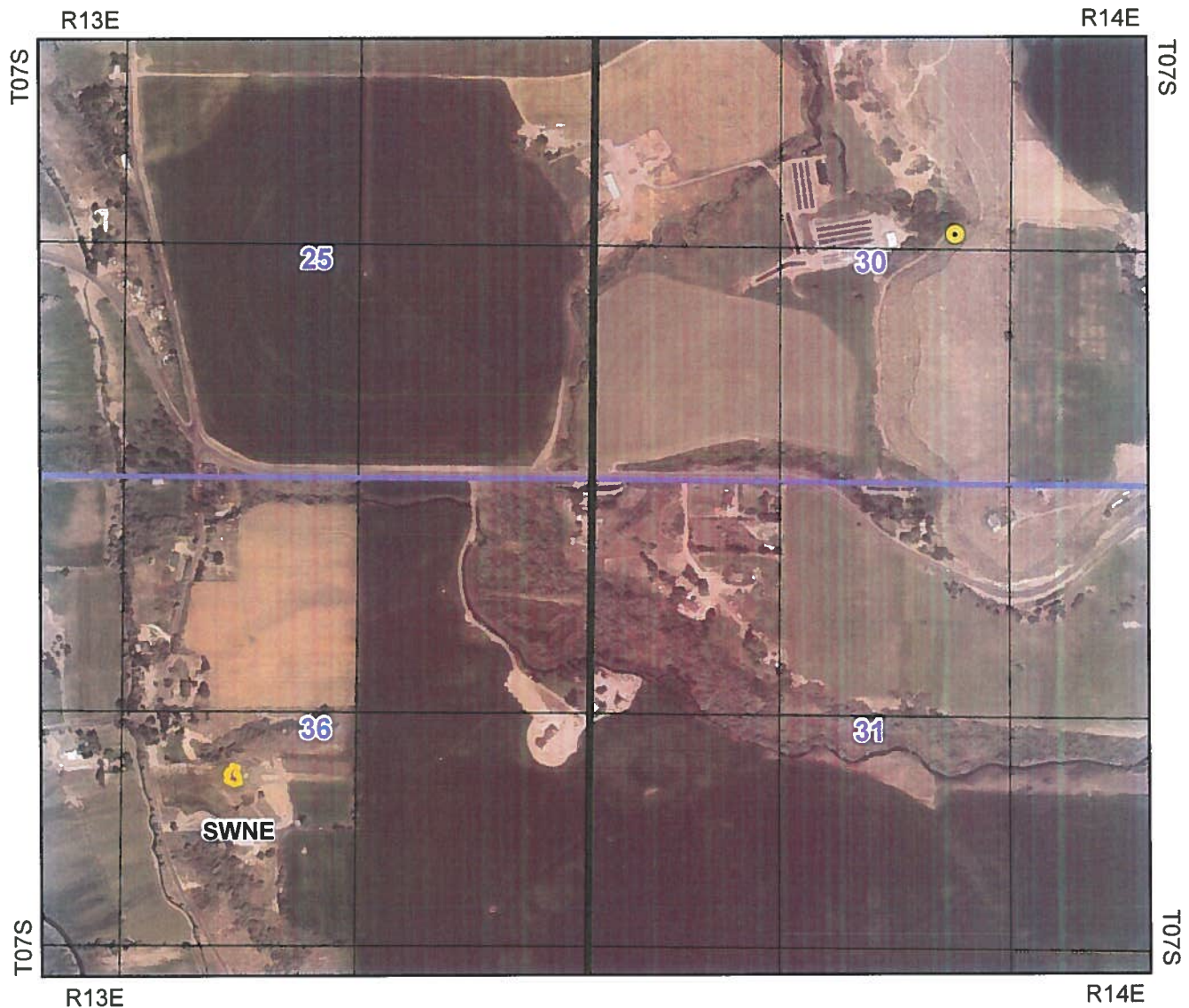


1/2 HP
pump



State of Idaho
Department of Water Resources
Attachment To Water Right License
36-16646

This map depicts the HEATING place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.1 0.2 0.4 Miles

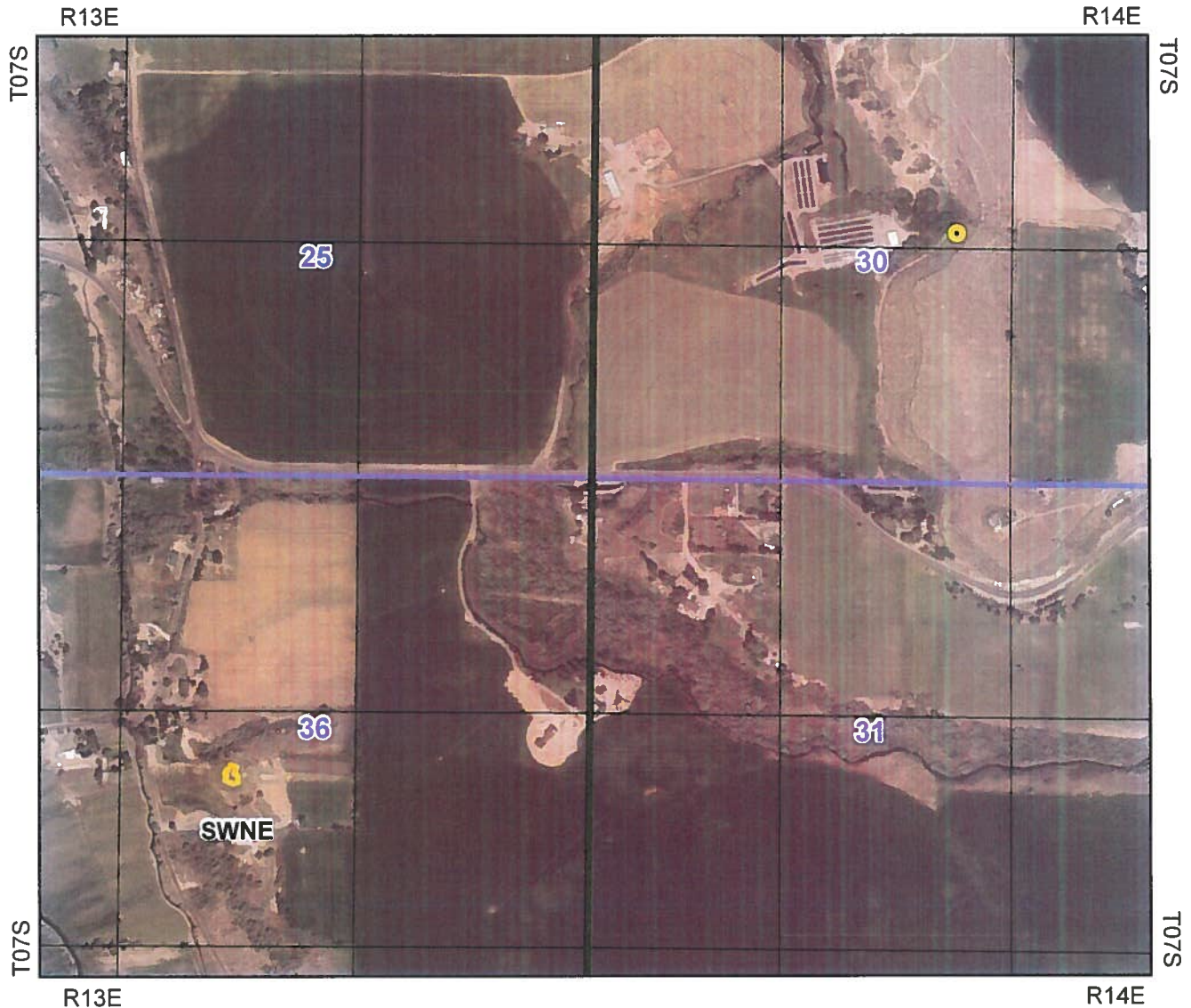
-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters



State of Idaho
Department of Water Resources

Attachment To Water Right License 36-16646

This map depicts the COOLING place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



0 0.1 0.2 0.4 Miles

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





36

Mark Boldec

539-6199

8/30/12

2:15 PM

System 20" line Hoagland Tunnel

4" Irrigation line

2" to house 1" through house

1/2 HP Pump

1 home

365 days 24-7