

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8444
Exam Date: 03/09/2015

1. Current Owner: PETER M THOMAS TRUST
C/O E PARRY THOMAS
PO BOX 642
SUN VALLEY ID 83353
(208)622-4987

RIVER GROVE FARM
C/O E PARRY THOMAS
PO BOX 642
SUN VALLEY ID 83353

2. Accompanied by: Completed in-house.

3. **SOURCE**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-22255; 37-557; 37-558 and 37-559.
2. Other water rights with the same point of diversion: N/A

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SE1/4SE1/4NE1/4 Sec. 5, Twp 02N, Rge 18E, B.M.
BLAINE County

Method of Determination: Point of diversion determined by using 2011 and 2013 aerial imagery and as indicated by the property caretaker.

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>	
02N	18E	5				.7									1.8				2.5

Total Acres: 2.5

PLACE OF USE: DOMESTIC

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>	
02N	18E	5													X				

Method of Determination: Place of use determined by using 2011 and 2013 aerial imagery and by information provided by property caretaker.

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>
		7.5 Hp			

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

D. **FLOW MEASUREMENTS:** No measurement required per current beneficial use examination rules.

E. **FLOW CALCULATIONS**

☐ Additional Computation Sheets Attached

Measured Method: Theoretical Yield:

$$Q = \frac{8.8 \times (Hp) \times (Eff)}{H}$$

Where H = total head = pumping level + (2.31 x system pressure)

Static water level = 10.0 ft (No Driller's Report available/estimated by using deepest reported static water level which, varied from 5' to 10', from available Driller's Reports from nearby wells)

System pressure assumed at 60 psi

Hp = 7.5 (per Walker Water Systems)

$$H = 10.0 + (50 \times 2.31) = 125.5$$

$$Q = \frac{8.8 \times 7.5 \times .70}{125.5} = 0.37 \text{ cfs}$$

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.5 \text{ acres} \times 3.5 \text{ AF} = 8.75 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.08 \text{ cfs} \times 215 \text{ days} \times 1.9835 = 34.12 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 8.8 \text{ AF}$$

2. Volume Calculations for Other Uses: Domestic in-house: 0.6 AF**G. NARRATIVE/REMARKS/COMMENTS**

Permit 37-8444 was permitted for 0.080 cfs ground water irrigation for 2.5 acres and 0.04 cfs domestic for a combined total of 0.120 cfs.

Application for permit was submitted for the Peter Trust on 10/26/1988 and proof of beneficial use was submitted on 6/25/1991.

I drove by the property on 10/17/2014 while completing another field exam in the area, but I wasn't able to verify place of use (POU) or point of diversion (POD) from the roadside due to the dense foliage and trees surrounding the properties. Shortly thereafter, Charles G. Brockway contacted me about this permit after he had received a call from Mr. Thomas in response to a message I had left on Mr. Thomas's answering machine. After speaking with the caretaker, Mr. Brockway provided me with the location and a description of the POU and the location of the POD. According to the information Mr. Brockway obtained from the caretaker, the well is located on the lot indicated in the application for permit (Lot 1 of the Flying Heart Ranch #1 Subdivision), but the POU was developed on an adjacent lot (Lot 1A Blk 1 of River Grove Ranch Subdivision) and water is provided to that lot through a 2" service line running from the well.

I created GIS POU and POD shapefiles based on the information provided and then printed a map of the shapefiles and forwarded them to Mr. Brockway. He indicated that his client agreed that it was a fair representation of the irrigation occurring on the property and the location of the point of diversion. There was some irrigated land in the NWSE on BLM ground (approximately 0.4 acres) that was omitted from the shapefile and I mentioned to Mr. Brockway that his client should discontinue irrigation of those acres. I also omitted a very small portion of ground (0.036 acres) in the SWNE from the POU shapefile due to it being less than 0.05 acres. A licensing amendment was then processed to change the POU to 0.7 acres of irrigation in the SENE and 1.8 in the NESE of Sec. 5, Twp 05N, Rge 18E.

Overlap review indicates potential overlap with Aspen Lakes Canal Co. Big Wood River irrigation rights 37-557, 37-558 and 37-559 in the SENE of Sec. 5, Twp 02N, Rge 18E and overlap with Peter Trust Big Wood River irrigation right 37-22255 in the NESE. Condition R67 has been placed on the license limiting combined irrigation on the property to 0.03 cfs and 3.5 afa.

Recommend licensing 0.080 cfs with 8.80 afa for irrigation use, and 0.04 cfs with 0.6 afa for domestic use, for a combined total of 0.12 cfs and 9.4 afa.

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	04/01 to 11/01	0.080 CFS	8.80 AF
DOMESTIC	01/01 to 12/31	0.040 CFS	0.60 AF
<u>Totals:</u>		0.120 CFS	9.40 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

Date

3-16-2015

Reviewer

Date

4/21/2015

37-8444 System Diagram

