

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8871

Exam Date: 05/06/2008

1. Current Owner: FRANCES M FROST AND
ALLAN R FROST
2577 SUNRIDGE CIR
TWIN FALLS ID 83301
(208) 734-6575
2. Accompanied by: Allan Frost
Phone No: (208) 734-6575
Address: 2577 Sunridge Cir, Twin Falls, ID 83301
Relationship to Permit Holder: Same

3. SOURCE

SPRINGS

TRIBUTARY

SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: No other rights used at same place of use
2. Other water rights with the same point of diversion: Many; 37-4322A, 37-4322B, 37-11160, et al.

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

SPRINGS SE¼NW¼SE¼ Sec. 21, Twp 06S, Rge 13E, B.M. GOODING County

(locally known as Upper Decker Spring)

Method of Determination: Visual Inspection, GPS, GIS, Satellite Imagery

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06S	13E	21														X			

Method of Determination: Visual Inspection, GPS, GIS, Satellite Imagery

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- 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.
- X Aerial Photo Attached (required for irrigation of 10+ acres).
- X 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>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

*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>
Bucket	Plastic	Grainger	N/A	N/A	5.5 gallon	05/05/2008

2. Measurements:

All sprinkler lines closed at shut-off valves so all water was directed into "freeze line" which discharges into open channel below cabin. I used a 5.5 gallon bucket and stop watch to determine the system capacity and rate of flow used under normal conditions. After ten measurements, the average time to fill the bucket was 7.29 seconds with times ranging from 6.60 seconds to 7.78 seconds. The result is a system capacity of 0.10 cfs.

$$(60 \text{ sec} / 7.29 \text{ sec}) \times 5.5 \text{ gal} = 45.3 \text{ gpm} \rightarrow 45.3 \text{ gpm} / 448.83 \text{ gpm/cfs} = 0.10 \text{ cfs}$$

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method: NONE

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: DOMESTIC

$$(1 \text{ home} \times 0.6 \text{ AFA}) + (\frac{1}{2} \text{ acre irrigation} \times 0.6 \text{ AFA}) = 1.2 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS

The source, according to Mr. Frost, is locally known as Upper Decker Spring. Many diversions are present at the spring. Mr. Frost has a 3" pvc pipe inserted in the ditch at the head of the spring (figures 1-3). Immediately after exiting the ditch, a buried joint reduces the pipe to a 2" pvc pipe. At this joint is a riser with a vertical vent pipe on the line. From here, the 2" pvc pipe is buried to Mr. Frost's property where it splits off to irrigation control valve boxes (figure 4) leading to drip lines (figure 5) and impact sprinklers for irrigation of approximately ½ acre of garden and landscaping (figures 6-8). The main line has shut off valves along the way to direct water to a "freeze line" which is used to run water through the system in the winter. A valve above the freeze line directs water to the cabin. The freeze line discharges water into an open channel (figure 9) directly below the cabin which crosses under River Rd and ultimately drains into the Snake River.

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>
DOMESTIC	1/01 to 12/31	0.040 CFS	1.2 AF
<u>Totals:</u>		0.040 CFS	1.2 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 06/05/2008

Reviewer _____ Date _____

ATTACHMENT A

MAP OF DIVERSION AND DELIVERY SYSTEM

T06S R13E Sec 21 NWSE

Cabin

2"

3"

Spring

0 50 100 200 300 400 500 Feet



ATTACHMENT B
PHOTOGRAPHS OF DIVERSION AND DELIVERY SYSTEM



FIGURE 1: Head of Upper Decker Spring



FIGURE 2: Ditch collecting spring water



FIGURE 3: Ditch and pipes carrying spring water to the west, view facing west



FIGURE 4: Irrigation control valve box



FIGURE 5: Riser pipe with automatic timer control and drip line



FIGURE 6: Riser pipe with portable hose and upper section of garden and landscaping



FIGURE 7: Lower section of garden and landscaping near cabin

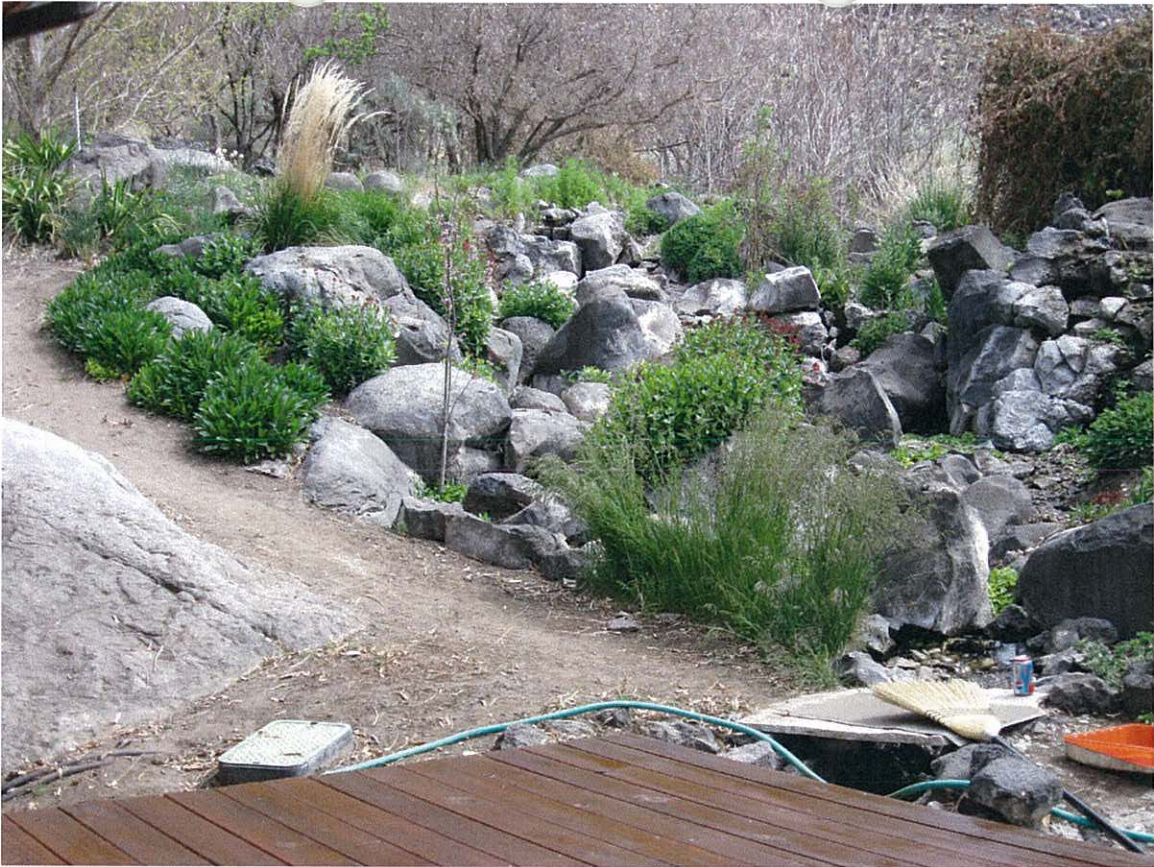


FIGURE 8: View looking upslope from deck of cabin



FIGURE 9: Measuring system capacity at “freeze line” discharge point