

A. GENERAL INFORMATION

Exam Date: 8/25/2011

- USDA FOREST SERVICE
SAWTOOTH NATIONAL FOREST
2647 KIMBERLY RD E
TWIN FALLS ID 83301
(208) 737-3200

- TRIBUTARY
GOOSE CREEK

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>	
14S	19E	30											X		X				
													L 4						
14S	19E	31					X		X										
									L 1										

Method of Determination: Tracks were collected with a Garmin GPS map 76S receiver and downloaded into an ArcMap shapefile that corresponds with 2009 aerial photography and verified the place of use to be in Twp 14S Rge 19E S 30 SWSW1/4, SESW1/4 and Twp 14S Rge 19E S 31 NENW1/4 and NWNW1/4. See attached map.

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 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>
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Calibrated 5 gallon bucket & stop watch.

2. Measurements: Filled 5 gallon bucket 3 times to 5 gallon mark with the following times:
 15:12 s; 0.04 cfs; measurement error of 0.5 sec of 0.6
 15:34 s; 0.04 cfs; measurement error of 0.5 sec of 0.6
 14:32 s; 0.05 cfs; measurement error of 0.5 sec of 0.7
 Average time: 15:09 approximately 0.04 cfs.

E. FLOW CALCULATIONS: N/A

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):

$$9 \text{ campsites} \times 5 \text{ people} \times 10 \text{ gallons} \times 137 \text{ days} = 61,650 \text{ gallons} / 325,850 = 0.19 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS

Permit 47-17248 is for 0.04 cfs domestic use for a public campground with nine camping sites.

Application for permit 47-17248 submitted by USDA Forest Service, was filed on October 19, 2005, and proof of Beneficial Use was submitted December 9, 2010.

System consists of a spring box that delivers water downhill to a 5000 gallon tank through a 3 inch galvanized steel pipe (GSP). From there the water descends through a 2 inch GSP to a 45 watt solar pump (see attached Spring Development Plan and Profile). The water is then pumped uphill approximately three hundred yards through a 2 inch GSP to a 15,000 gallon holding tank. From the holding tank the water is routed downslope through a 4 inch high density polyethylene pipe (HDPE) approximately 800 yards to the Diamondfield Jack Campground. The campground contains 9 camping spurs serviced only by drinking fountain spigots and threadless spigots to prevent recreational vehicles from utilizing the water source.

According to Roger Anderson, Recreation Manager for the Minidoka District of the Sawtooth National Forest, average water use is 10 gallons per camper, and that when all 4 campgrounds serviced by the Porcupine Springs system are at capacity (760 people) the maximum amount of water utilized is 7,500 gallons per day. This averages out to 9.8 gallons per camper. Therefore, 10 gallons per camper was used to calculate volume for each campground.

On the day of the exam the system was at capacity and no water was actively moving through the system allowing flow from the spring box and the 5000 gallon holding tank overflow to be diverted into overflow drains that discharged approximately 20 feet below the pump. I was able to measure the flow approximately 60 yards downstream where it was channeled under the service road through a corrugated metal pipe using a 5 gallon bucket and stop watch. Average flow rate was determined to be 0.04 cfs.

Water rights 47-17246; 47-17247; 47-17143 and 47-4169 all share the same point of diversion as permit 47-17248. Since the flow rate for the entire system was determined to be 0.04 cfs, a condition will be placed on the license limiting the combination of the aforementioned rights to a flow rate of 0.04 cfs. Overlap analysis for place of use indicates potential overlap with 47-7911. Right 47-7911 is for domestic use of ground water at the campground and water was diverted using a hand pump on a well. I found no evidence of an existing hand pump or a well at the site. As the status of water right 47-7911 is currently active, a condition limiting both 47-7911 and 47-17248 to 13,000 gallons per day will have been placed on the draft license.

Recommend permitting a rate of diversion of 0.04 cfs with annual volume of 0.20 afa for domestic.

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	01/01 to 12/31	0.040 CFS	0.20 AFA
<u>Totals:</u>		0.040 CFS	0.20 AFA

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 Bill Moll Date 11-29-2011

Reviewer [Signature] Date 12/1/2011



Figure 1: Diamondfield Jack Campground



Figure 2: Spring box



Figure 3:Hatch for 5000 gallon storage tank and housing for chlorinator



Figure 4: Solar pump system



Figure 5: Threadless spigot



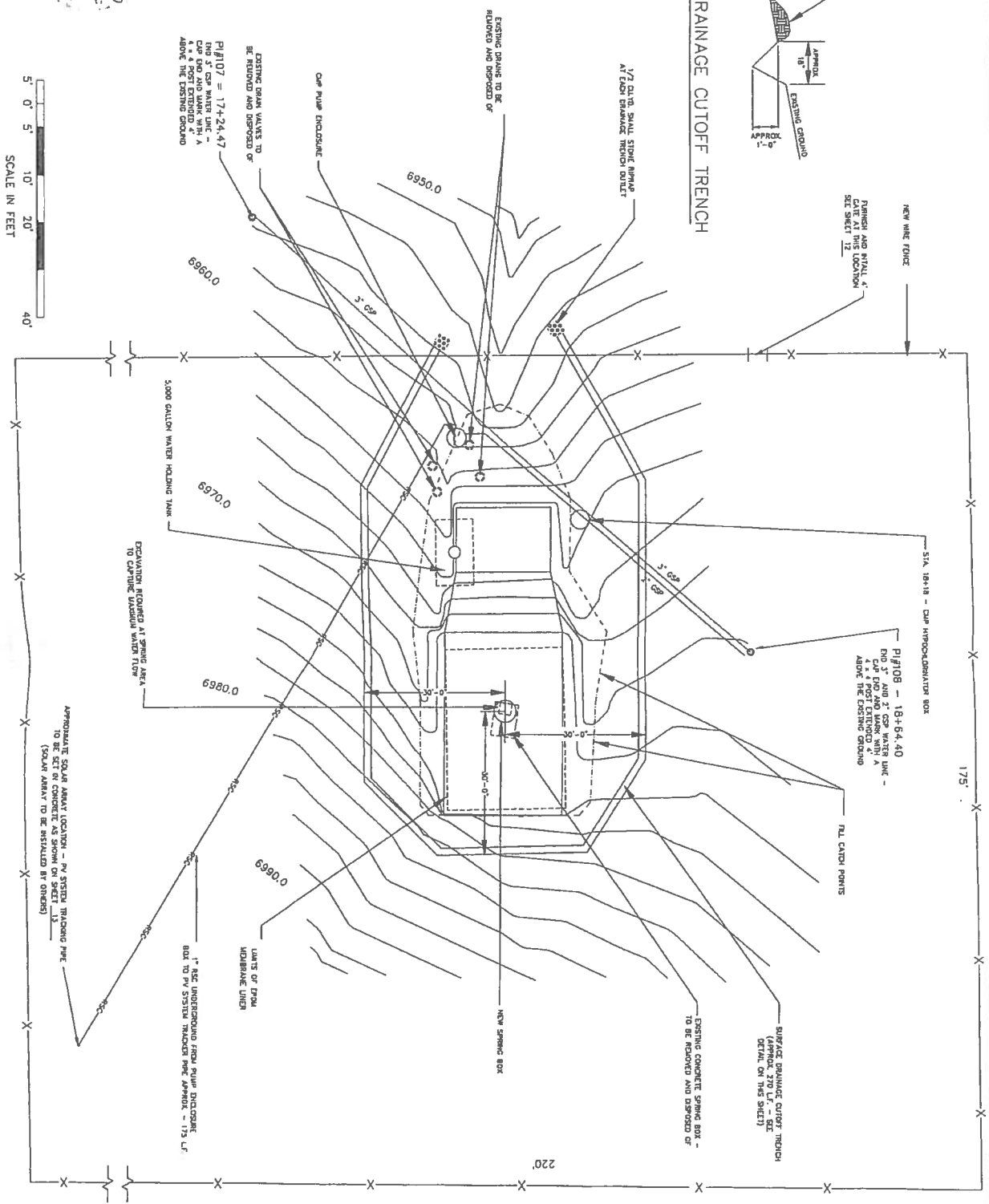
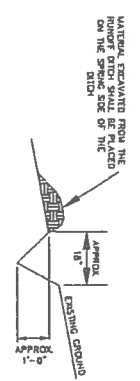
Figure 6: Looking down hatch into 15,000 gallon storage tank

Permit 47-17248



7/13/76
 J. J. Lamb
 7/13/76

SURFACE DRAINAGE CUTOFF TRENCH



5 0 5 10 20 40
 SCALE IN FEET