

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 92-10023

Exam Date: 6/23/2007

1. Current Owner: JIM CLAMPET
PO BOX 395
POST FALLS ID 83877
(208)773-1879

2. Accompanied by:

Phone No:

Address:

Relationship to Permit Holder:

3. SOURCE

SPRINGS
UNNAMED STREAM

TRIBUTARY

CRYSTAL CREEK
CRYSTAL CREEK

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:

UNNAMED STREAM	NE1/4NE1/4	Sec. 29, Twp 44N, Rge 01E, B.M.
BENEWAH County		
SPRINGS	SE1/4NE1/4NE1/4	Sec. 29, Twp 44N, Rge 01E, B.M.
BENEWAH County		

Method of Determination:

U.S.G.S. Crystal Peak 7.5 Minute Quadrangle

Garmin Global Positioning System (GPS) receiver

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	
44N	01E	29	X																

Method of Determination:

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
703496	N/A	N/A	Gravity System	N/A	
703497	N/A	N/A	Gravity System	Harbor Freight	Portable hand pump (discharge varies with speed of hand pumping)

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Bucket	5 GAL	N/A	N/A	N/A	-	N/A
Wristwatch		~~N/A~~ Remington	N/A	N/A	-	N/A

2. Measurements:

POD 1 (Stream) Bucket 5 GAL / 30 seconds POD 2 (Well) Bucket 5 GAL / 40 seconds

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method:

$$\frac{x}{60 \text{ seconds}} \times \frac{5 \text{ GAL}}{30 \text{ sec}} = 10 \text{ GPM}$$

$$\frac{x}{60 \text{ sec}} \times \frac{5 \text{ GAL}}{40 \text{ sec}} = \frac{300}{40} = 7.5 \text{ GPM}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A None observed

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

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

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

$$\begin{aligned} &10.0 \text{ GPM} \\ &+ 7.5 \text{ GPM} \\ &17.5 \text{ GPM} = 0.04 \text{ CFS} \end{aligned}$$

By reference to chart

Volume Calculations for Other Uses:

$$1.2 \text{ AF} \times 1 \text{ home} = 1.2 \text{ AF}$$

G. NARRATIVE/REMARKS/COMMENTS

Field exam begun 6/23/07 and completed July 3rd 2007 due to camera problems. Points of Diversion (POD) and the Place of Use (POU) are located North East of Fernwood, Idaho.

The gravity water system has two Points of Diversion (POD) that are connected to a common distribution system. Flow of the two PODs can be measured separately. POD 1 is located in the bed of a Westerly flowing, unnamed, stream where a perforated pipe leads to an underground reservoir. POD 2 is a well at a buried spring that currently supplies water via a portable hand pump. Both PODs, and the reservoir which holds water from POD 1, are higher in elevation than the Points of Use.

POD 1 (N 47 Degrees 08.137, W 116 Degrees 21.219) consists of a buried perforated pipe that is covered by artificial fabric. The pipe is buried in the bed of an unnamed stream that descends a steep slope and flows West. Water collecting in the perforated pipe moves down a 30-foot long three-inch diameter pipe into a 700-gallon capacity concrete reservoir with screw down cover. The reservoir is underground except for an elevated round cover. The reservoir is constructed from a concrete manhole barrel that rests upon a concrete base.

POD 2 (N 47 Degree 08.144, West 116 Degrees 21.294) is a shallow, owner dug, well that lies above a buried spring. It has an out of service water line that connects to the rest of the water system at the valve

junction. The owners intend to repair the broken water line from POD 2 during summer 2007. New pipe awaiting installation was visible on the ground between the well at the spring and the valve junction. The owners currently take drinking and dishwater from the well via buckets until the water line is repaired. The owners remove a portable hand-pump at the well to prevent unauthorized use of the water supply when they are away from the property.

Water exits from the reservoir via a white three-inch diameter pipe that travels 30 feet underneath a jeep trail before entering a 1.25 inch diameter black plastic pipe that runs down a steep hill parallel to the unnamed stream. Water that is not accommodated in the 1.25 inch pipe passes through an overflow pipe and back into the stream after passing under the jeep trail.

Water travels 300 feet down the slope in the black plastic pipe before reaching a junction. A water line (currently broken) runs north from the well (POD 2) with the portable hand-pump to the junction. A second water line continues North from the junction up an incline approximately 150 feet to the owners cabin. Several valves are at the junction. One cuts off water coming from the well (POD 2) to the junction. A second valve is used to drain the water line from the reservoir. Valves allow water to be diverted to an outdoor shower and to a cabin on the property. There is enough head from the spring or the stream reservoir to push water up approximately 10 to 15 feet in elevation to reach the cabin.

Flow measurements for POD 1 were taken at the inlet pipe leading into the reservoir after removing the screw down metal lid. These measurements were unsatisfactory because the orientation of the reservoir inlet and outlet pipes limited elbow room for accurate measurement and caused air to be trapped in the bottom of the bottle used for water measurements.

Two POD 1 water measurements were taken at the exit from the reservoir overflow pipe. The overflow pipe returns water to the unnamed stream. 10 gallons per minute were flowing from the overflow pipe into the unnamed stream. The measurements were taken after insuring that valves at the valve junction were set to prevent water from exiting the 300 foot pipe into the unnamed stream or into lines leading to the outdoor shower or the home. Soil in the streambed at POD #1 was damp and water could be heard gurgling below ground in the perforated pipe that leads into the inlet pipe for the reservoir.

Flow measurements were taken at POD 2 by having the owner's son pump as quickly as possible using the removable hand pump into a five-gallon bucket. The five-gallon bucket filled bucket in 40 seconds.

Water from the spring at POD 2 was visible coming down the hillside above the junction and in a drainage ditch next to the owner's access road. The water was draining toward the unnamed stream.

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	

Totals: 0.040 CFS

2. Recommended Amendments

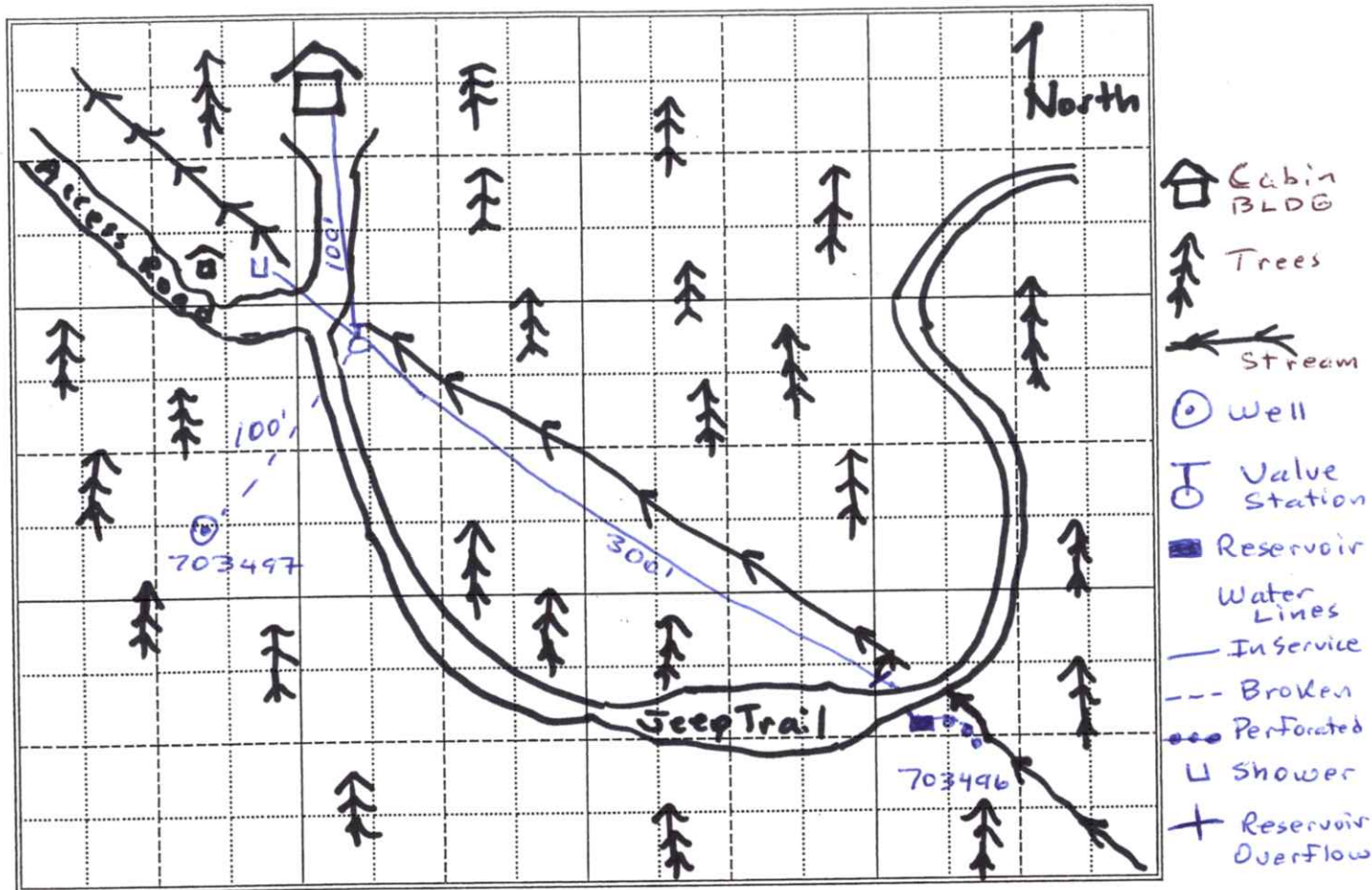
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name William M. Mapey Date 7/6/07
 Reviewer [Signature] Date _____

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



Scale: 1" = _____

_____ Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

_____ Aerial Photo Attached (required for irrigation of 10+ acres)

_____ Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size

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

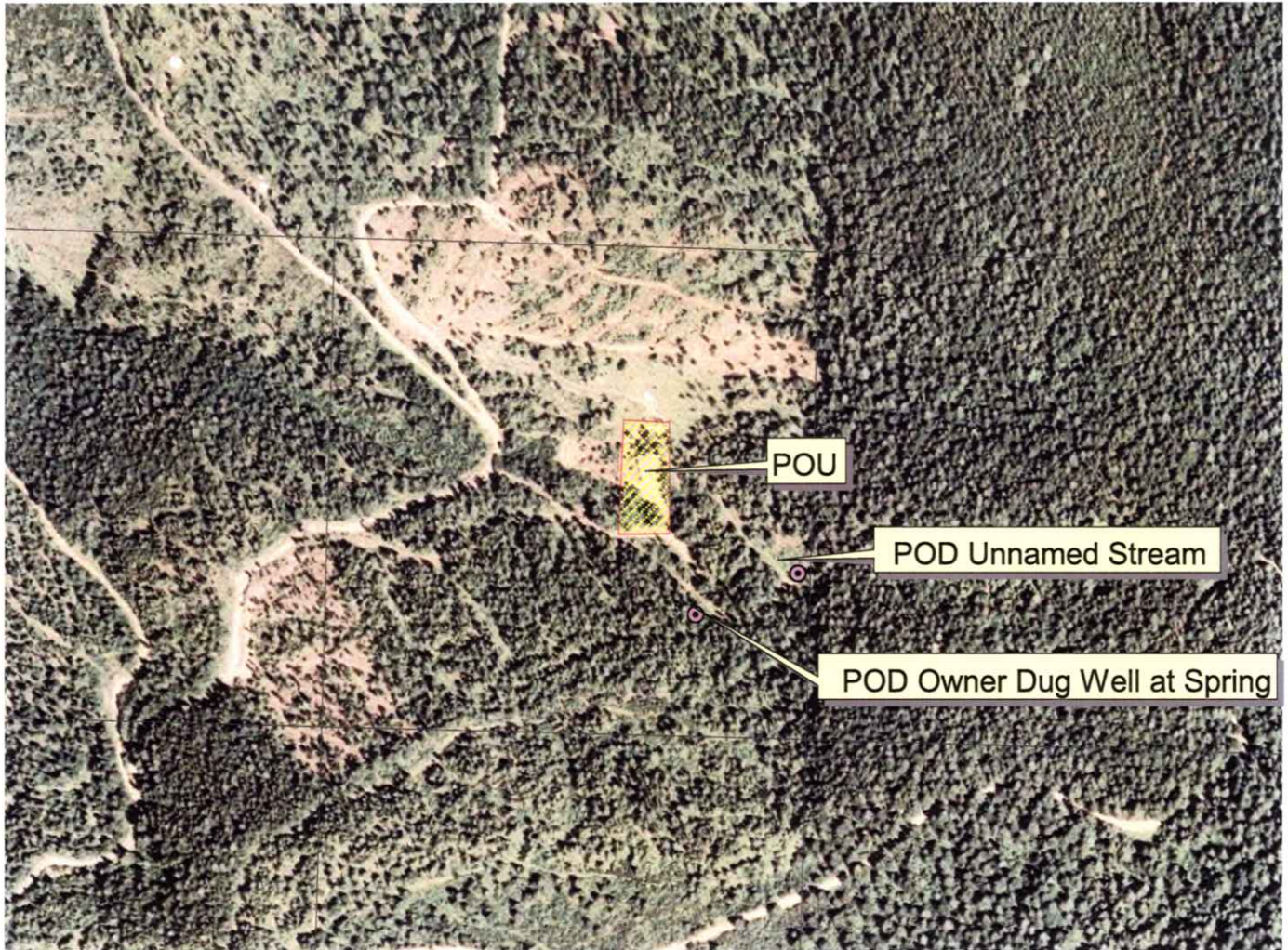
D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: _____

92-10023



0.1 0 0.1 0.2 Miles

A horizontal scale bar with four segments. The first segment is labeled '0.1', the second '0', the third '0.1', and the fourth '0.2 Miles'.

-  GCDB44N01E GCDB
-  Right POD
-  Right POU





92-10023 GPS Sats for
POD .JPG



92-10023 Cabin.JPG



92-10023 Damp spot at POD
in unnamed stream.JPG



92-10023 cabin above valve
station.JPG



92-10023 Gravity fed pipe
reservoir to house.JPG



92-10023 Outdoor shower
below valave station.JPG



92-10023 Outdoor
shower.JPG



92-10023 Pipe from
reservoir to house.JPG



92-10023 RES & POD Right
rear post.JPG



92-10023 Reservoir & POD
at rear post.JPG



92-10023 Reservoir & valve
towers.JPG



92-10023 Reservoir above
unnamed stream.JPG



92-10023 Reservoir overflow
back to stream.JPG



92-10023 Reservoir overflow
to unnamed stream.JPG



92-10023 Reservoir
overflow.JPG



92-10023 Reservoir -Valve
Station pipe.JPG



92-10023 Sample bucket at
POD.JPG



92-10023 unnamed stream for
reservoir.jpg



92-10023 Valve station for
reservoir & well.JPG



92-10023 Well above house
top-view.JPG



92-10023 well above valve
station.JPG



92-10023 Well at Spring
1.JPG



92-10023 Well at Spring
above house.JPG



92-10023 Well at Spring
without hand pump.JPG



92-10023 Well at
Spring.JPG



92-10023 Well Side
View.JPG



92-10023 Well side-
view.JPG



92-10023 Well with hand
pump removed.JPG



92-10023 well.JPG



92-100023 Damp spot at
POD & GPS.JPG



GPS Sats for 92-10023.JPG





























































