

MEMORANDUM

Date: June 20, 2012
To: Water Right File 77-14299
From: shemenway
Re: Volume

Volume listed, due to not being instream. Volume was based on:
 $0.12 \text{ cfs} \times 104 \text{ days} (52 \text{ weeks} \times 2 \text{ days to make up the weekends}) \times 1.9835 = 24.7 \text{ af}$

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 77-14299

Exam Date: 10/20/2011

1. Current Owner: GREENHURST FARMS INC
5705 E GREENHURST
NAMPA ID 83686
(208)466-1742

2. Accompanied by: Terry and Kathy Henrickson/owners
Phone No: hm: (208) 466-1742; cell (208)713-5854
Address: 5705 E Greenhurst, Nampa, ID 83686
Relationship to Permit Holder: self

3. SOURCE

SPRING

TRIBUTARY

FRENCH CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 77-7376 Domestic/1 (same cabin and out buildings)
2. Other water rights with the same point of diversion: 77-14236 Domestic/1 (same spring and pipeline)

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

SPRING SW1/4SE1/4SW1/4 Sec. 25, Twp 24N, Rge 03E, B.M. IDAHO County

Method of Determination: Garmin GPS map 76S

2.

PLACE OF USE: POWER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
24N	03E	25	<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>	
											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**

A0016954

spring, gravity flow to control house (description of system, see "Narrative")

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

D. FLOW MEASUREMENTS

1. Measurements:

5-Gallon Bucket Measurement:

(5 gallon X 60 seconds)/4 sec = 75 gpm X 0.00223 = 0.17 cfs

Power Calculation (taken from App. Processing Memo #24 Amended)

900 sq ft cabin from spring source located 210 ft vertical drop from cabin.

900 ft-squared (15 watts/ft-squared) = 13,500 watts = 13.5 Kw

Reasonable to say that efficiency might be 50% (go to Fig. 1, Memo #24) at:

13.5 cross over to 50% = $HXQ = 350/210 = 1.66 = 1.7$ cfs

The Solar system that is also connected to the cabin, etc. does not supply enough energy, since the mountains are high on both sides, which limits the amount of sunlight there in the valley, in addition to in the winter not receiving direct sunlight. For this reason, hydro power is needed.

RECOMMEND 0.12 cfs as permitted**E. VOLUME CALCULATIONS**

1. ~~No Volume~~ is required to be listed with Power Use. *See 6-20-12 memo.*

*C.S. 6-20-12***F. NARRATIVE/REMARKS/COMMENTS**

The spring is located 210 ft elevational drop from the POU. The spring is located under a large rock, with plastic and sandbags used as a collection area and a manifold discharging to 100 ft of 6 inch black flexible pipe, that reduces to 300 ft of 5 inch aluminum pipe, reducing to 150 ft of 4 inch aluminum pipe, reducing to 1700 ft of 3 inch aluminum pipe (this section has 4 (1/8 inch) rainbirds on the line with individual shut off/on valves for the use in the event of a fire; there are also a few rainbirds located surrounding the cabin). At the 4 inch aluminum section, there is a faucet which is used for domestic use when they have individuals in a camper/motor home (this is covered under another permit). The 3 inch aluminum pipe reduces to 2 inch and enters into the control house or power house where it connects to a (2) 2 inch valves. One splits into 2 (1 inch hoses going into the pelton wheel (07921 DC San Ac model 109E 1224H101, DC24V 025A), the other 2 inch by passes into a 1/4 inch steel manifold. There is a 6 inch discharge from the pelton wheel discharging out of the control house to a rocked area (to minimize disturbance and erosion, and avoid siltation of the stream bed), which then runs into French Creek. There are Xantrex 10-battery storage for the system. The control house is always kept locked when unattended. The 6 inch discharge pipe makes it an easy access for measuring flow. Discharge from the power house is designed to prevent fish migration up the system pipeline, due to the rocking and higher elevation from French Creek itself.

This Power water right is not under FERC jurisdiction (per the Appl. Processing Memo #24 amended). It is "on private land, from a spring, and since it is <5.0 cfs, it requires no additional information."

Have conditions of permit approval been met? ☒ Yes ☐ No See narrative above, for description for meeting conditions.

G. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>
POWER	01/01 to 12/31	0.120 CFS
<u>Totals:</u>		0.120 CFS

2. Recommended Amendments

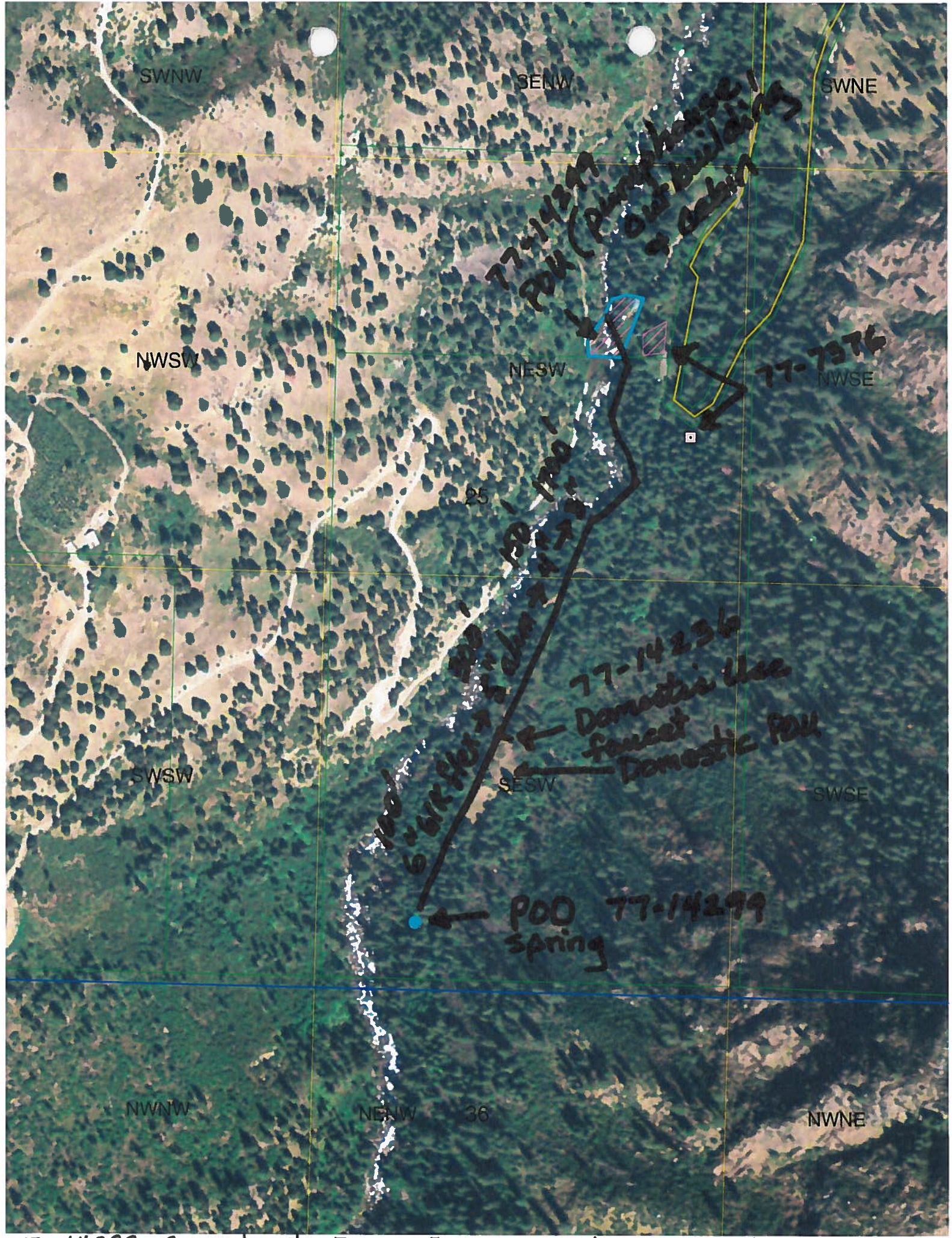
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

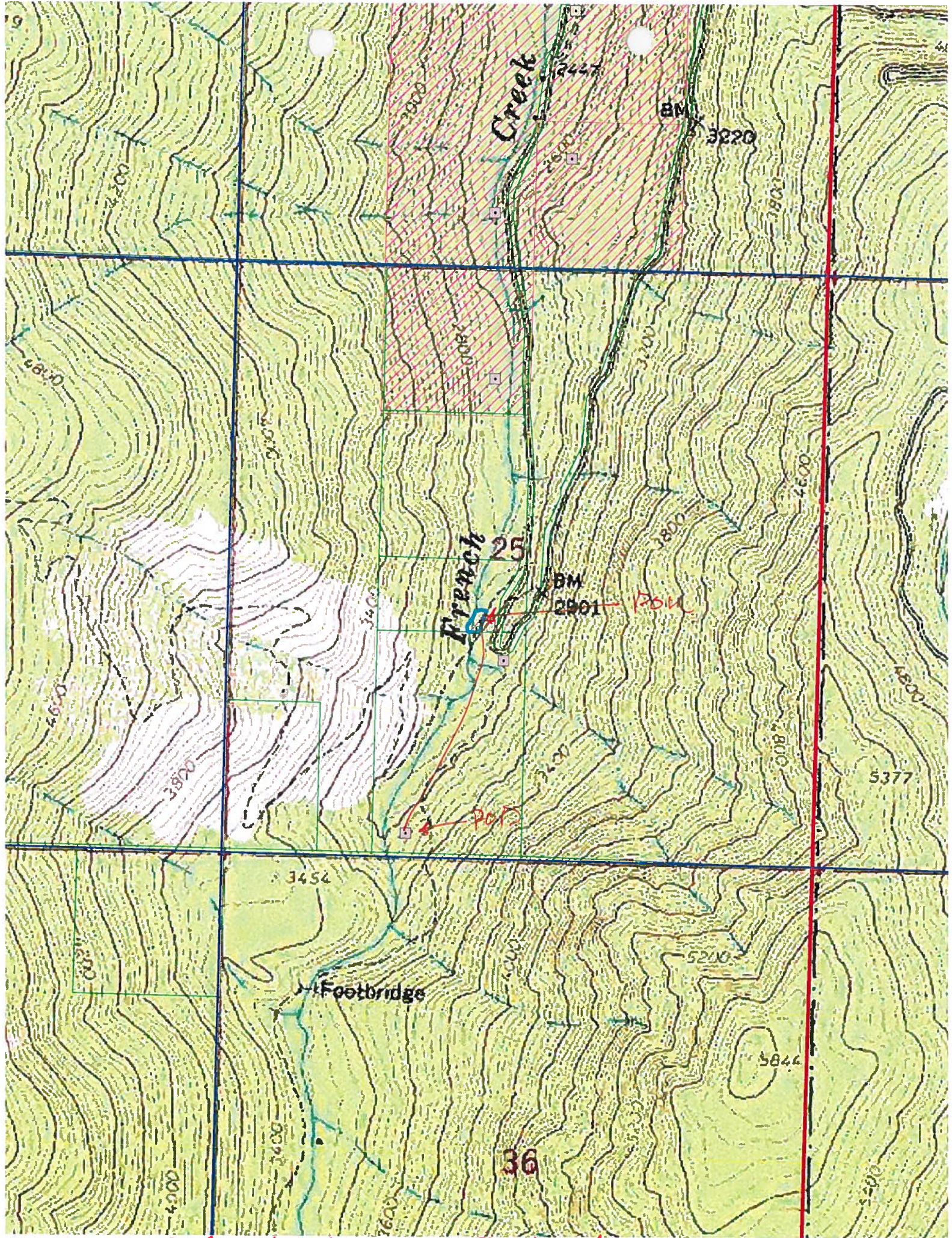
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

H. AUTHENTICATION

Field Examiner's Name

Sandy Hemenway Date 10/25/11





POD

10/20/2011



A001695

POD
spring
with
plastic
+
sand-
bags
used a
collectic
are
with
manifol
discharg
to 6"
flexibl
black
pipe
(100')

77-14299 Greenhurst Farms Inc .

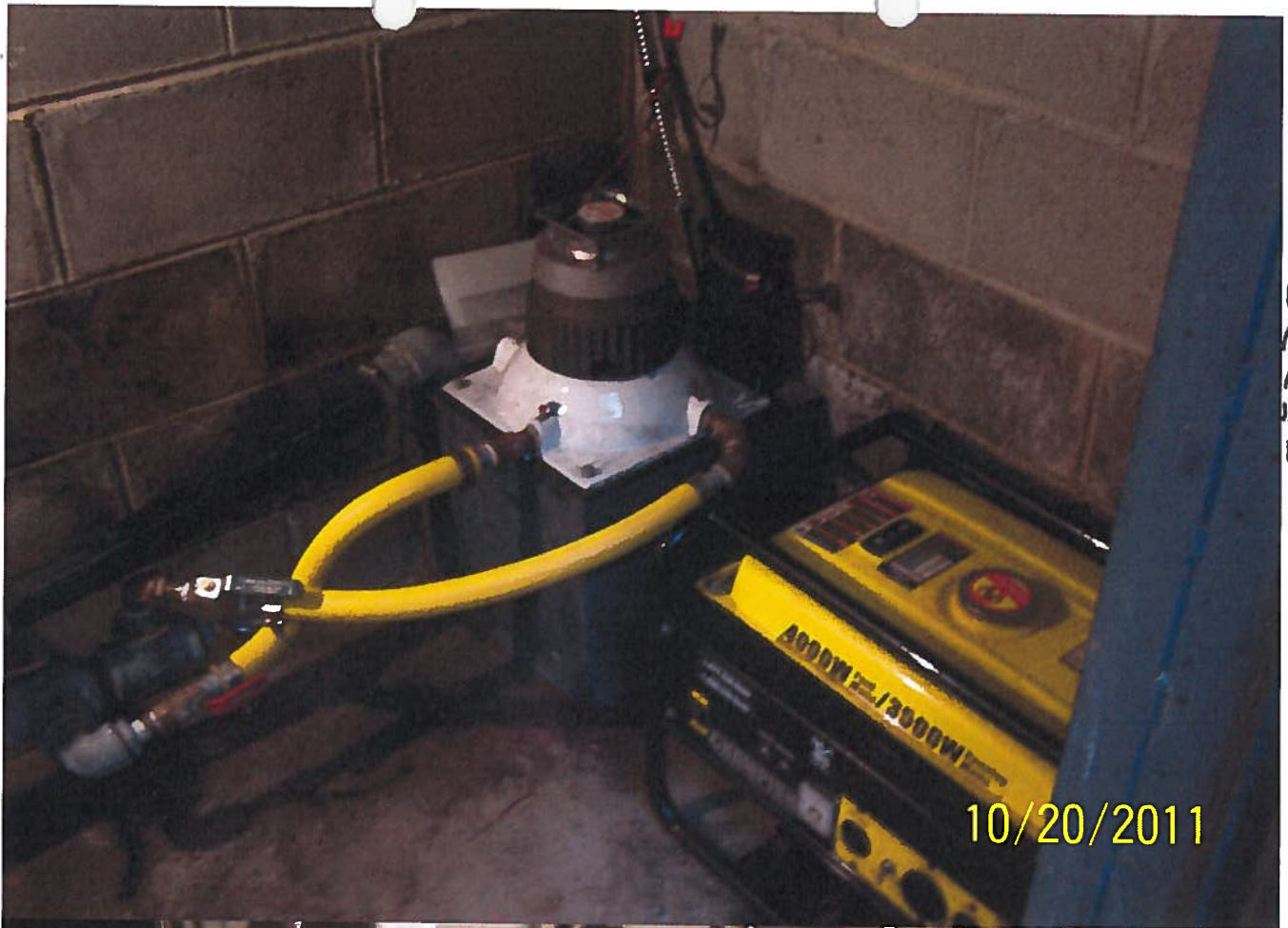
S. Hemerway



from
6"
flexible
pipe it
reduces
to
300' of
5"
aluminum
then
150' of
4"
aluminum
then
1700' of
3"
aluminum
with
(4) 1/8"
rainbirds
on
hillside
+ some
around
cabin in
the even
of a fire
(each
with
individus
shut-off
valves)

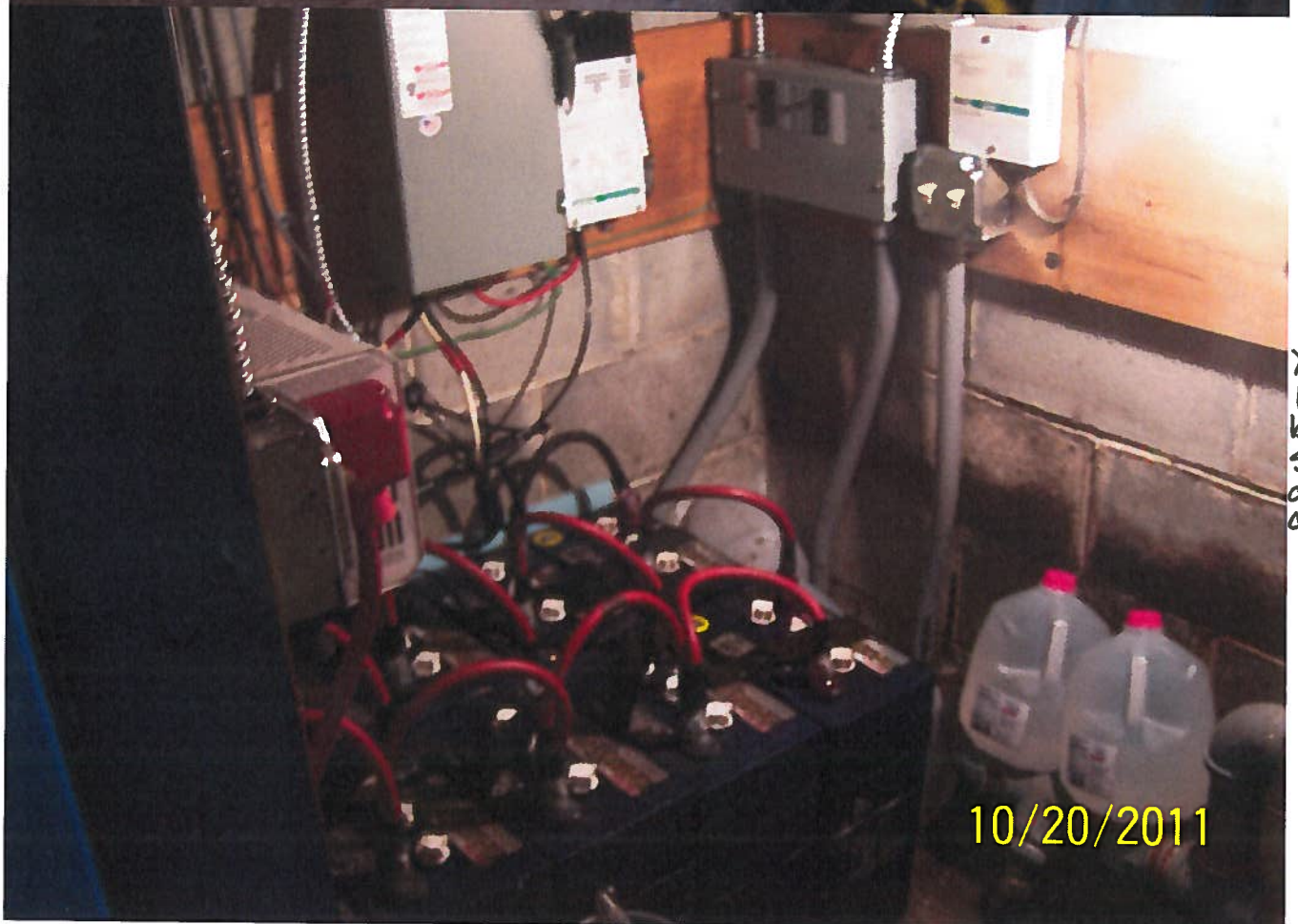


Control
house
for both
solar +
hydro
power



DL SanA
Model
109E
022414101
DC 24V
025A

10/20/2011



Xantrex
10-
battery
storage
deep
cycle

10/20/2011

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S. Hemerly



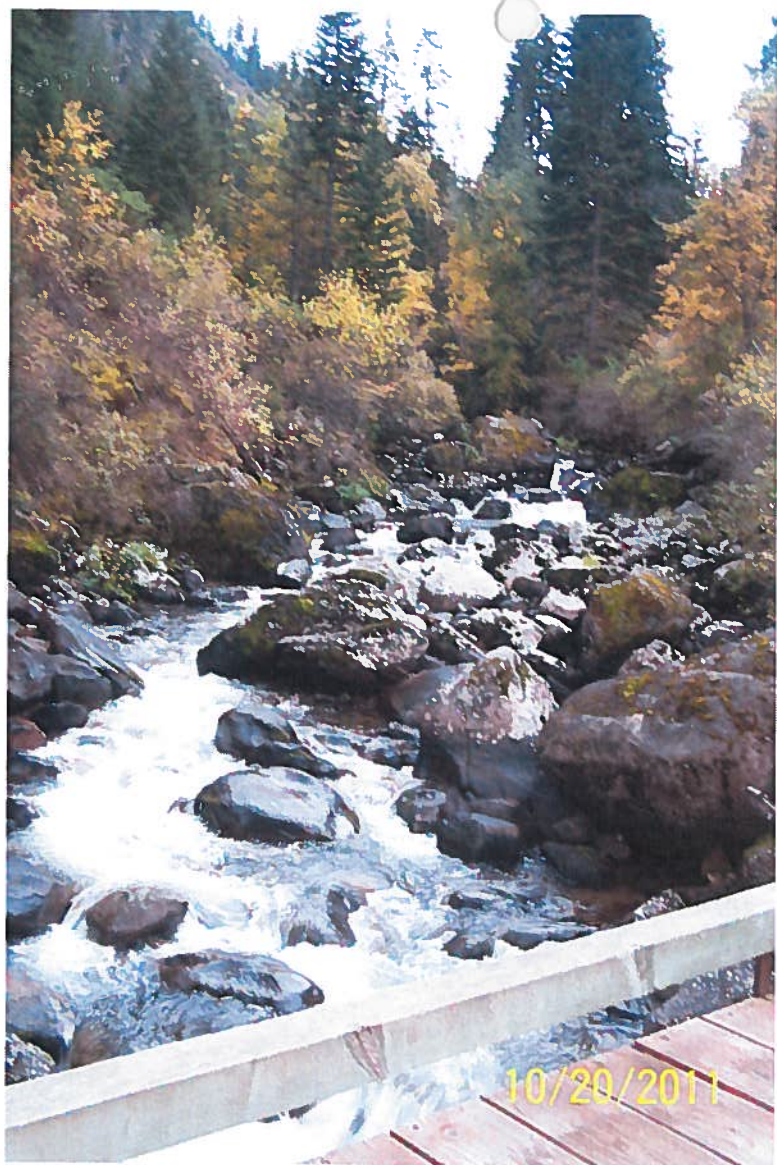
6"
Overflow
coming
out of
the
control
house
to rock
back
going
eventual
to
French
Creek

10/20/2011



POU
lower
cabin
+
out-
building
+
control
house

10/21/2011



77-14299 Greenhurst Farms .

Stream flow of French Creek,
at time of inspection, the
water diverted from the
spring is far less than
25% of the stream flow
of French Creek.

S. Hemerway



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

August 11, 2011

GREENHURST FARMS INC
TERRY HENRICKSON
5705 E GREENHURST
NAMPA ID 83686

RE: Request to Schedule a Beneficial Use Field Examination for Permit No. 77-14235, 77-14236, 77-14237, 77-14238, and 77-14299

Dear Mr. Henrickson:

I will be conducting Beneficial Use Field Examinations (exams) in location of your permits on Thursday, September 29, 2011. This exam is required to complete the process for you to receive your License for your water right.

Please give me a call to set up a time to meet you, or to meet someone else who can show me the point of diversions and place of use for each of the above Permits, and answer some questions. If you are unable to attend, please complete and return the enclosed forms for each Permit.

If you have any question, please give me a call at (208)287-4920 or on my cell at (208)761-0280. Thank you in advance for your help.

Sincerely,

Sandy Hemenway

Sr. Water Resource Agent

Enclosure: