

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 79-14082

Exam Date: 9/19/2007

1. Current Owner: TOM LINDSEY
PO BOX 355
LUCILE ID 83542
(208)628-3987

And/Or

SUSAN LINDSEY
PO BOX 355
LUCILE ID 83542
(208)628-3987

2. Accompanied by: Tom Lindsey
Phone No: SAME AS ABOVE
Address: SAME AS ABOVE
Relationship to Permit Holder: Owner

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 79-7269, 79-7137 & 79-7194
2. Other water rights with the same point of diversion: NONE

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER L6 SE1/4NW1/4 Sec. 23, Twp 25N, Rge 01E, B.M.
IDAHO County

Method of Determination: Visual Inspection and use of aerial photography.

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
25N	01E	2							X										
									L 5										

Method of Determination: Visual Inspection and use of aerial photography.

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

SEE ATTACHED SHEET.

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

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

YES 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
POINT OF DIVERSION	Unknown	0.5	Unknown	Sump pump	1.5 inch pvc
POINT OF DIVERSION	Unknown	0.5	Unknown	Sump pump	1.5 inch pvc

*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 and Stopwatch	N/A	Plastic	N/A	N/A	4 gallons	N/A

2. Measurements:

The time fill method was used to calculate the flow of this system. The sump pumps were small submersible units, so no information could be attained from those. However, the time fill method should be sufficient.

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method:

Allowable flow rate = 0.02 cfs (see attached sheet).

Permit No: 79-14082

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

Allowable volume is 0.1 afy (see attached calculation sheet).

G. NARRATIVE/REMARKS/COMMENTS

The water for this permit is diverted from a mine. The point where the water is diverted is between 100 ft and 200 ft underground, so it has been called ground water. No well drilling requirements are bound to this diversion, since a well shaft was not actually constructed. The water being diverted is natural occurring seepage water that has filled the mine shafts. The water must be pumped from one location to another to avoid flooding of the mine shaft being worked on, and to allow material to be moved through the tunnels without having equipment bogging down in mud.

The water is diverted by two submersible sump pumps. The owner stated that these pumps were ½ Hp sump pumps. From the vantage point that I had, I have no reason to doubt this information. The pumps divert the water into an 1 ½ inch PVC pipeline that goes through the main tunnel and open discharges the water into an older abandoned tunnel. At the point where the water is discharged, the owner fills four 4-gallon water jugs. I timed the filling of these jugs to determine the flow rate for this permit. I couldn't use the pump flow rate, since the actual diversion of water for the beneficial use is the time it took to fill the 4-gallon jugs. Not all the water diverted by the sump pump is collected when the jugs are being filled. The sump pumps run non-stop, so the domestic use described in this permit is actually a secondary use to the sump pump system.

The water once collected is transported by the owner in his vehicle to the home, which is approximately 3 miles north on Highway 95. Once at the home, the water collected from the mine is used for culinary purposes only (mainly drinking and cooking). The minimum volume we can allow is 0.1 afy, and the use of this water falls below this amount. Therefore, I am recommending the 0.1 afy amount.

There are 3 water rights, 79-7269, 79-7137, and 79-7194 that all supply water to this domestic home. All three water rights are from different sources, so there is no reason for not allowing this right to proceed with licensing. However, I would include a condition that when all these sources are combined, the total use of water is limited to a single domestic use with ½ acre of yard irrigation, not to exceed 13,000 gallons per day.

The conditions of this permit have been met. The diversion system described in the permit is the point where the sump water is collected and does not include the sump pumps and PVC piping. The condition requiring manual diversion only applies to the filling of the jugs by hand and transporting the jugs to the home by manual means. This part of the condition is clearly being done. The pumping of the sump water is not protected by a water right and falls under separate jurisdiction, since it is not removed from the mine shaft.

Have conditions of permit approval been met? X 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	0.020 CFS	0.10 AF
	<u>Totals:</u>	0.020 CFS	0.10 AF

2. Recommended Amendments

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

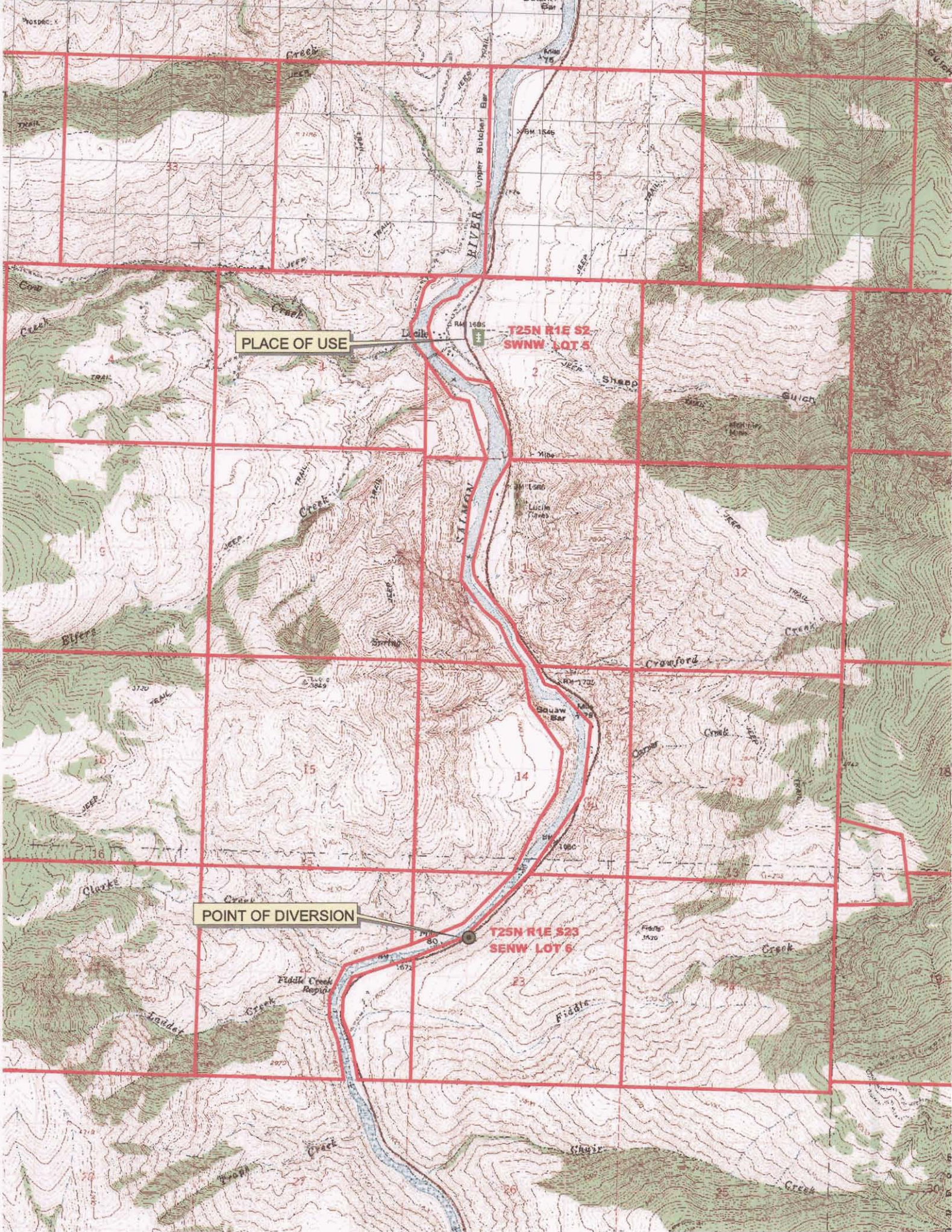
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

DANIEL A. NELSON – SENIOR AGENT

Field Examiner's Name Daniel A. Nelson Date 10-1-07

Reviewer _____ Date _____ SEAL

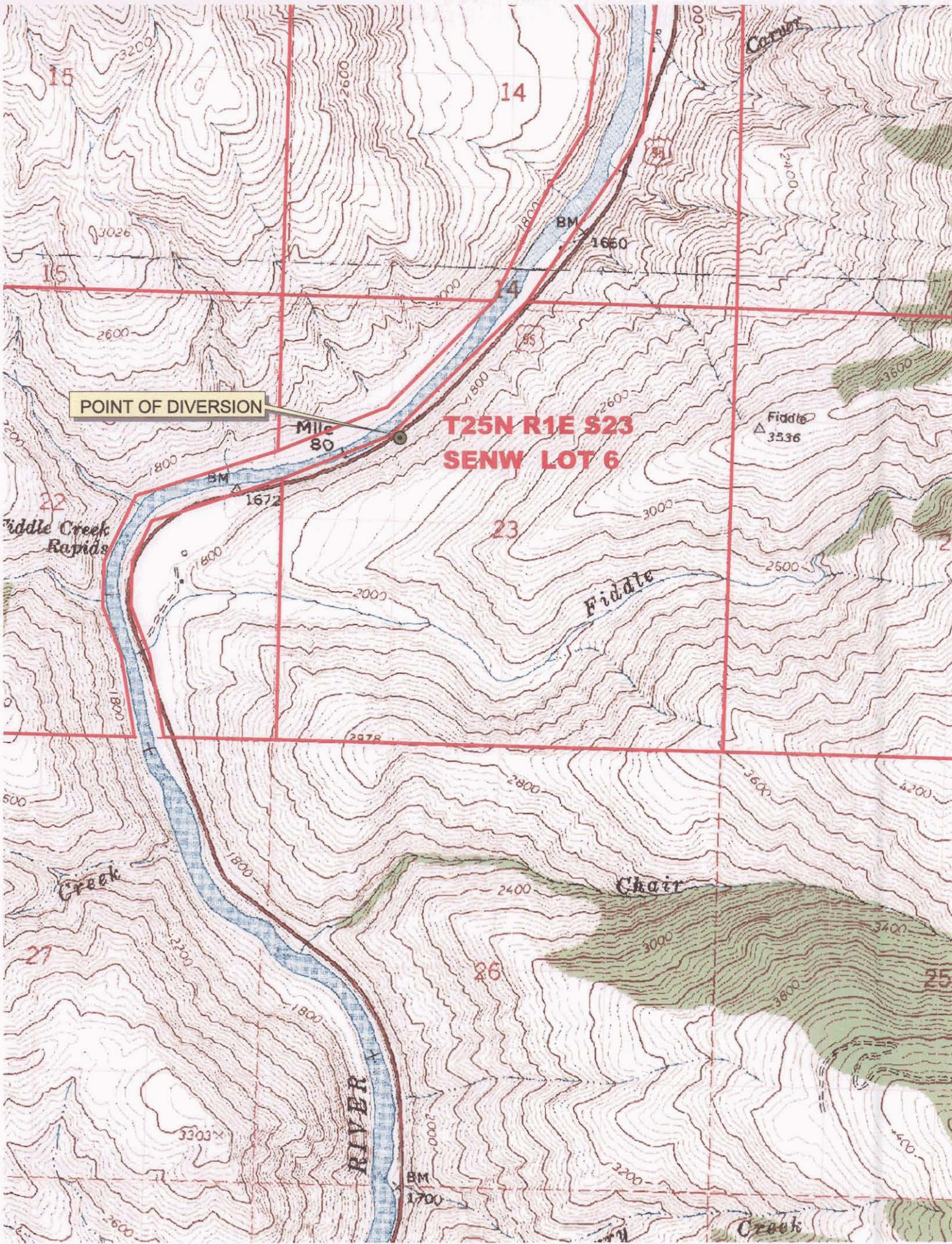


PLACE OF USE

T25N R1E S2
SWNW LOT 5

POINT OF DIVERSION

T25N R1E S23
SENW LOT 6



POINT OF DIVERSION

Mile
80

**T25N R1E S23
SENW LOT 6**

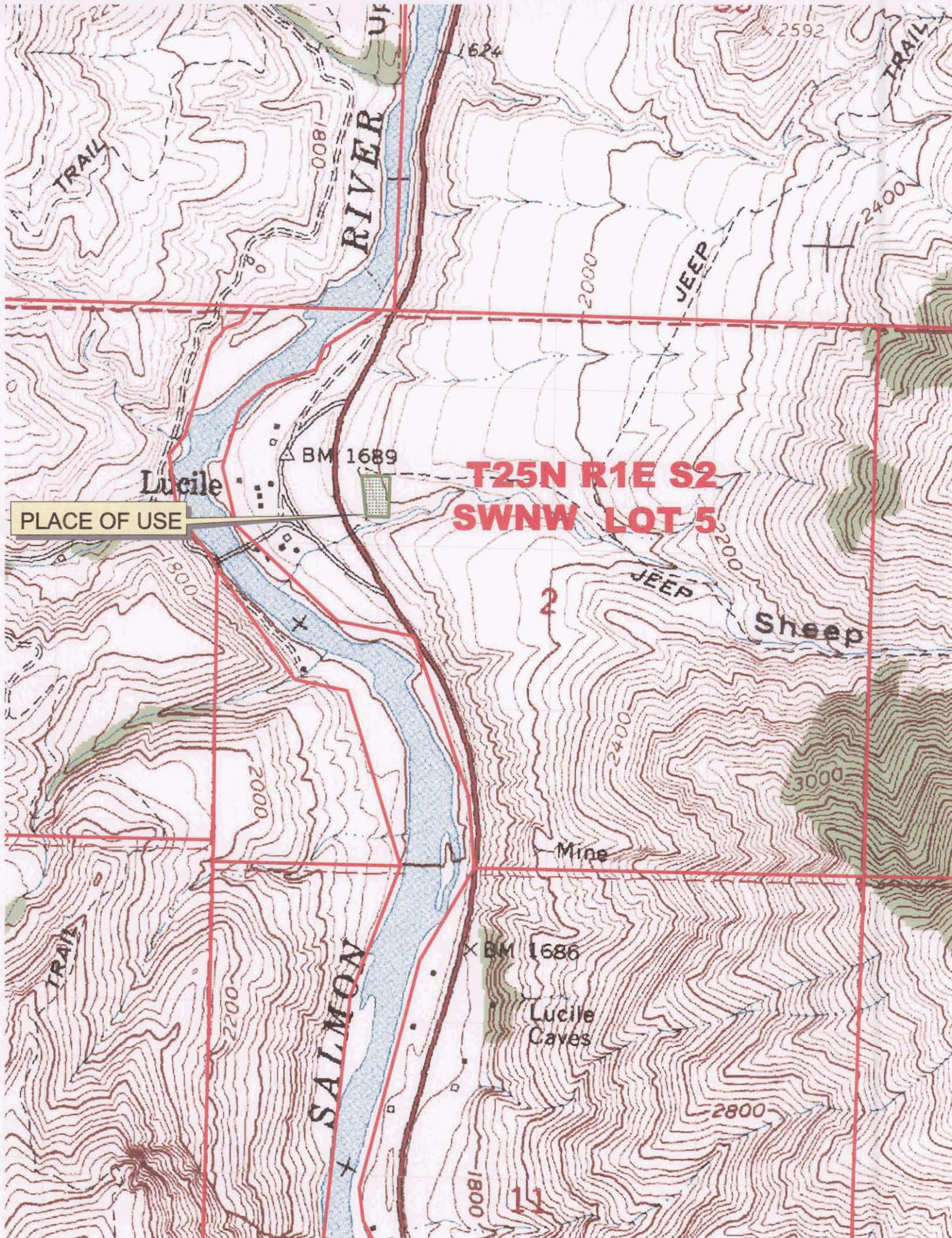
Fiddle Creek
Rapids

Fiddle

Chair

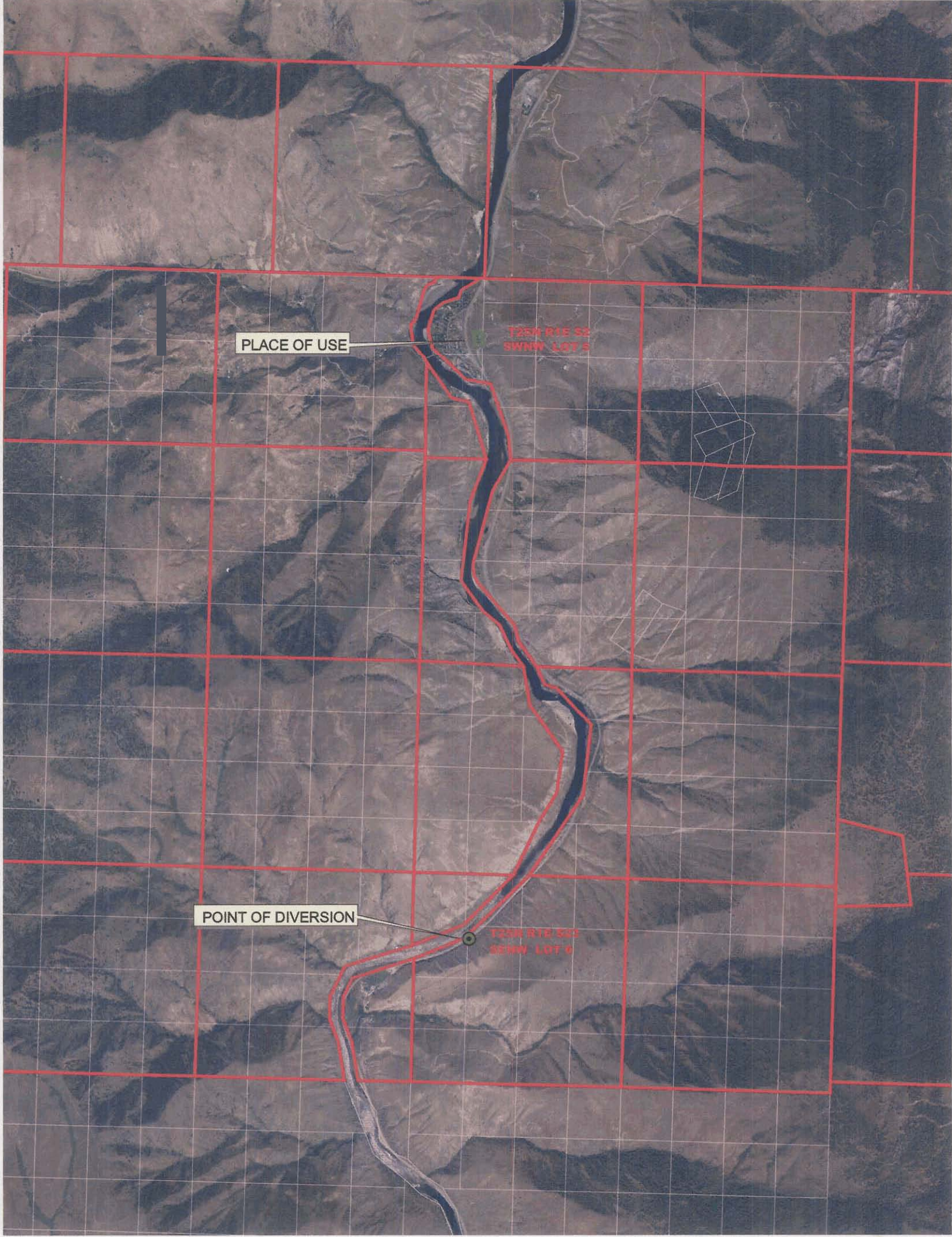
RIVER

Creek



PLACE OF USE

**T25N R1E S2
SWNW LOT 5**



PLACE OF USE

T25N R1E S2
SWNW LOT 5

POINT OF DIVERSION

T25N R1E S2
SWNW LOT 6



POINT OF DIVERSION

T25N R1E S23
SENW LOT 6

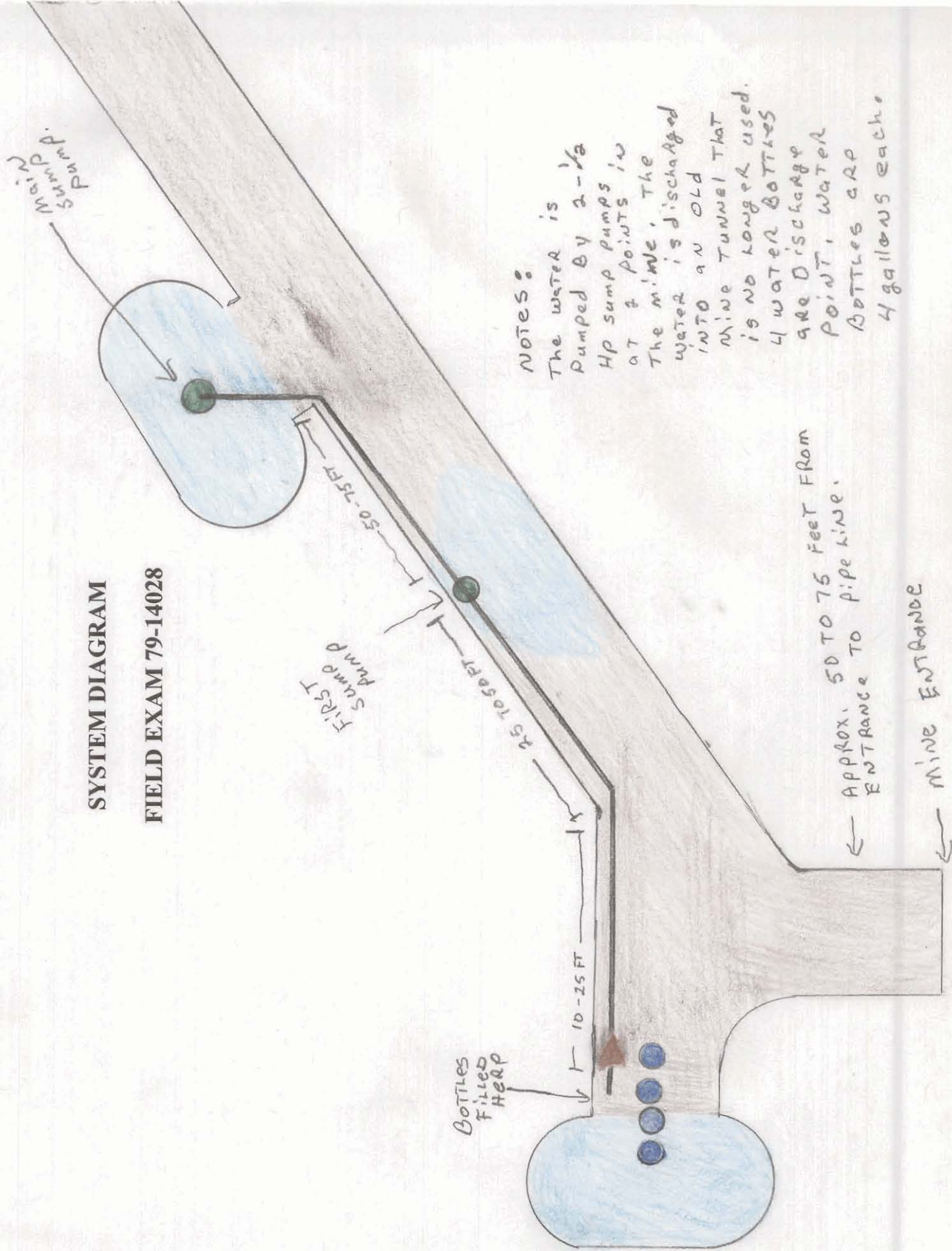
PLACE OF USE

T25N R1E S2
SWNW LOT 5



SYSTEM DIAGRAM

FIELD EXAM 79-14028



NOTES:

The water is pumped by 2-1/2 HP sump pumps in at 2 points in the mine. The water is discharged into an old mine tunnel that is no longer used. 4 water bottles are discharge point. Water bottles are 4 gallons each.

TIME FILL CALCULATIONS FOR WATER RIGHT 79-14082 FIELD EXAM

On 9/19/2007, I performed a field exam for water right 79-14082. The source for this right is groundwater found in a mine. The water source is approximately 150 to 300 feet under ground through a mining tunnel. The water seeps into the mining tunnels, and is pumped out of the tunnel by 2 sump pumps to prevent the flooding of the work area. The owner fills four 4-gallon jugs from the sump pump discharge. The water is carried by hand out of the mine to the owner's home to be used for culinary purposes. The only reasonable method of measuring this water was the time fill method. I timed the how long it took the owner to fill the 4-gallon jugs to determine the flow rate on this system. I timed the fill rate of flow. I used a simple volume calculation to determine the volume. My calculations are as follows:

FLOW RATE CALCULATION:

Time #1 – 10 sec

Flow in gpm = (4 gal / 10 seconds) X (60 seconds / 1 minute) = 24 gpm

Flow in cfs = 24 gpm / 448.8 = 0.053 cfs

Permit only allows for 0.02 cfs, so will recommend that amount

VOLUME CALCULATIONS:

[(4 gal jug) X (4 jugs) X (365 days)] / 32850 = 0.017 afy

CONCLUSION:

This is a pretty simple system, with no real diversion system. The only semi diversion points are the pumps and pipelines to pump out the mine, and the location that he fills the water jugs at the end of the line. The permit limits the flow rate to 0.02 cfs and the jugs can be filled at faster rate than that, so I will recommend the permitted amount. The pump flow rate is irrelevant, since the entire flow rate can't be put to beneficial use. The only other problem is the afy amount. The minimum amount we can allocate is 0.1 afy. This is the amount I am recommending, even though the amount determined is well below that amount. We can't use proper rounding standards in this case.

RECOMMENDED DIVERSION RATE = 0.02 cfs.

RECOMMENDED VOLUME = 0.1 afy

PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 9/19/2007

FILE NUMBER 79-14028



The photos above show the diversion in the mine. The pictures above at the far left and in the middle show the points where water is diverted by sump pump in the mine. The photo above right shows the discharge point into an older tunnel and the 4 blue 4-gallon jugs used to transport the water.

The bottom photo shows the home where the water is used.