

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-7807

Exam Date: see narrative

1. Current Owner: DAVID L SQUIER
56 LAUREL RD
NEW CANAAN CT 06840
(203)972-0702

And

SUE S SQUIER
56 LAUREL RD
NEW CANAAN CT 06840
(203)972-0702

2. Accompanied by: see narrative

Phone No:

Address:

Relationship to Permit Holder:

3. **SOURCE**TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-12919 perhaps 37-8134? (see narrative)
2. Other water rights with the same point of diversion: 37-12919 perhaps 37-8134? (see narrative)

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

GROUND WATER

SE1/4SE1/4

Sec. 23, Twp 05N, Rge 17E, B.M.

BLAINE County

Method of Determination: GIS tax lot layer & IDWR employee generated map in field exam file

2.

PLACE OF USE:

IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N 17E 23																1.1	1.1
05N 17E 26	1.8																1.8

Total Acres: 2.9

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	
05N 17E 23																X	
05N 17E 26	X																

Method of Determination: GIS layers

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 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>
		2	2823018110		

*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>

2. Measurements: Well said to yield 30 gpm according to pump installer (Wood River Drilling) per 9/20/2005 letter from owner.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method:

Theoretical yield:

$$Q = \frac{8.8 \times (Hp) \times (Eff)}{H}$$

Where: Hp = 2 Hp (size of pump per 9/20/2005 letter from owner)

Eff = efficiency = 70 % (assumed)

H = total head = pumping level + (2.31 x system pressure)

Assume pumping level of 45 feet + or - (based on 50 foot well depth per 9/20/2005 letter from owner)

Assume system pressure = 40 psi

$$H = 45 + (2.31 \times 40) = 137.4$$

$$Q = \frac{8.8 \times 2 \times .70}{137.4} = 0.09 \text{ cfs}$$

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.9 \times 3.5 = 10.15 \text{ ac-ft (use 10.2 ac-ft)}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.07 \text{ cfs} \times 184 \times 1.9835 = 25.5 \text{ ac-ft}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 10.2 \text{ ac-ft}$$

2. Volume Calculations for Other Uses: Domestic (one home) = 0.6 ac-ft (IDWR standard for in house use)**G. NARRATIVE/REMARKS/COMMENTS**

Permit 37-7807 lists James R Reid as the current owner pursuant to a May 1990 assignment of permit from Robert Potters, the original 37-7807 applicant and permit holder. In August of 1990, James R Reid filed proof of beneficial use for permit 37-7807. Amanda Folsom, a former employee of IDWR, made multiple unsuccessful attempts to contact Mr. Reid and eventually discovered that David & Sue Squier are the owners of the property associated with 37-7807 (see 7/30/2001 memo in 37-7807 file). David & Sue Squier provided a copy of a March 1989 warranty deed conveying Lot 2 of Potters Subdivision from Robert & Gertrude Potters to Robert & Jean Reid. They also included a copy of a June 1999 warranty deed conveying Lot 2 of Potters Subdivision from Robert & Jean Reid to David & Sue Squier. A copy of a September 1998 quitclaim deed was obtained that conveyed Lot 2 of Potters Subdivision from James R Reid to Robert & Jean Reid. Potters subdivision consists of a two lot subdivision north of Ketchum, which I assume was originally developed by Robert Potters. I checked with the Blaine County Assessors office and they could find no record of James Reid owning Lot 1 of Potters Subdivision, dating back to the mid 1980s when Robert Potters first conveyed Lot 1 to another individual. Therefore, it appears that permit 37-7807 was, and is, associated with Lot 2 of Potters Subdivision. It appears that any groundwater development on Lot 2 of Potters Subdivision should be associated with 37-7807 and that a license for 37-7807 could be issued to the current owners, David & Sue Squier, of Lot 2 of Potters Subdivision.

As previously indicated, proof of beneficial use for permit 37-7807 was made in August of 1990. The 7/30/2001 memo from Amanda Folsom indicates that the original home on the property was moved and that the Squiers were in the process of building a new home on the property. A copy of a 7/30/2001 letter in the file from Amanda Folsom indicates that due to the ongoing construction on the lot, a field exam could not be conducted and would be conducted by another agent at a later date. Examination of 1987 and 1992 aerial photography vs. 2004 and 2009 aerial photography indicates that the size and/or location of the home, driveways, landscaping, etc. changed on Lot 2 of Potters Subdivision. For example, the 2004 and 2009 aerial photography clearly shows a larger home, a larger driveway at a different location, and a tennis court that is not visible in the older aerial photography. In 2005, John Freitag, another former IDWR employee, gave me the 37-7807 field exam file and provided me with digital copies of field exam photos he took. The digital photos taken by John are dated 8/10/2005. However, this date is probably when the name of the individual photos were actually renamed rather than when the photos were taken. These photos show the tennis court, new home, and driveway locations that are reflected on the newer aerial photography. It is assumed that the field exam notes in the file were made by John and that he conducted the field exam and took the field exam photos sometime between July of 2001 (Amanda's correspondence) and August of 2005 (date of renamed photos).

Permit 37-7807 was permitted for the diversion of up to 0.19 cfs for domestic use and irrigation of up to five acres. Information provided by David & Sue Squier indicates that the well and pump system yields 30 gpm, or approximately 0.07 cfs (see September 20, 2005 letter in file). A theoretical calculation indicates that 0.07 cfs is a reasonable yield for the well so 0.07 cfs is the recommended diversion rate for 37-7807. Lot 2 of Potters Subdivision is 3.73 acres in size according to tax lot data. Examination of aerial photography indicates that it appears that the majority of the lot is irrigated minus the area taken up by the home, garage, driveway, tennis court, river side channel etc. The recommended irrigation place of use is 2.9 acres and includes the entire lot minus the obviously non irrigated areas (home, garage, driveway, tennis court, river side channel etc). Note that the permit describes the irrigation and domestic place of use as being located in the SESE of Section 23 (T05N, R17E). This area is an unsurveyed area north of Ketchum, but as of this date, the Department's GIS PLSS layers indicate that a portion of Lot 2 of Potters Subdivision is located within the SESE of Section 23 (T05N, R17E) and another portion is located within the NENE of Section 26 (T05N, R17E). Of the 2.9 recommended acres for irrigation, approximately 1.1 acres are within the SESE of Section 23 (T05N, R17E) and 1.8 acres are within the NENE of Section 26 (T05N, R17E). It also appears that the Squire home is located within both tracts. Note that Lot 2 of Potters Subdivision is located within HES 128. To describe the place(s) of use in both tracts a licensing amendment will be required.

The 37-7807 field exam file (and the WR backfile) includes a copy of a September 22, 1989 continuation order, that concludes that the water diverted under 37-7807 is trust water. Therefore, appropriate trust water conditions should be implemented into the 37-7807 license.

Examination of Department records indicates that SRBA decree 37-12919 (06/29/1983 priority for domestic use) is appurtenant to Lot 2 of Potters Subdivision. This record would be a point of diversion and place of use overlap of the domestic use described by 37-7807. However, note that 37-7807 has an earlier priority date (11/08/1979) than the SRBA decree. It also appears that water right license 37-8134 (not claimed in the SRBA despite being licensed prior to the commencement of the SRBA) may also be associated with Lot 2 of Potters Subdivision. Note that 37-8134 describes the point of diversion and place of use in the SWSE of Section 23 (T05N, R17E). However, examination of the 37-8134 field exam documents, in particular the maps included with the exam, appears to indicate the same property that is Lot 2 of Potters Subdivision. It should be noted that 37-8134 also has a 06/29/1983 priority date (exactly the same priority as SRBA decree 37-12919). It is possible that SRBA decree 37-12919 may actually supersede license 37-8134 due to their same priority date and 37-8134 being licensed in the name of Robert Potters and the fact that claim 37-12919 was originally filed by Robert and Gertrude Potters. Record 37-8134 will probably eventually have a "not claimed" status, a "superseded by decree" status, or perhaps eventually even be claimed via a late claim and even be determined to be appurtenant to some other lot in the area. However, despite the potential overlaps, 37-7807 will have the earliest priority date and would be viewed as the primary right associated with Lot 2 of Potters Subdivision property.

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>
IRRIGATION	05/01 to 10/31	0.070 CFS	10.20 AF
DOMESTIC	01/01 to 12/31	0.040 CFS	0.60 AF
<u>Totals:</u>		0.070 CFS	10.80 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 Ray Smith for John Freitag Date 12/2/2009

Reviewer [Signature] Date 12/7/2009

37-7807 Field Exam Photos taken by John Freitag



ABOVE & BELOW: Views of 37-7807 place of use on Lot 2 of Potters Subdivision showing irrigation use.



37-7807 Field Exam Photos taken by John Freitag



ABOVE: View of electrical box that apparently provides power to the 37-7807 well.

BELOW: View of pressure tanks used in 37-7807 system.



37-7807 Field Exam Photos taken by John Freitag

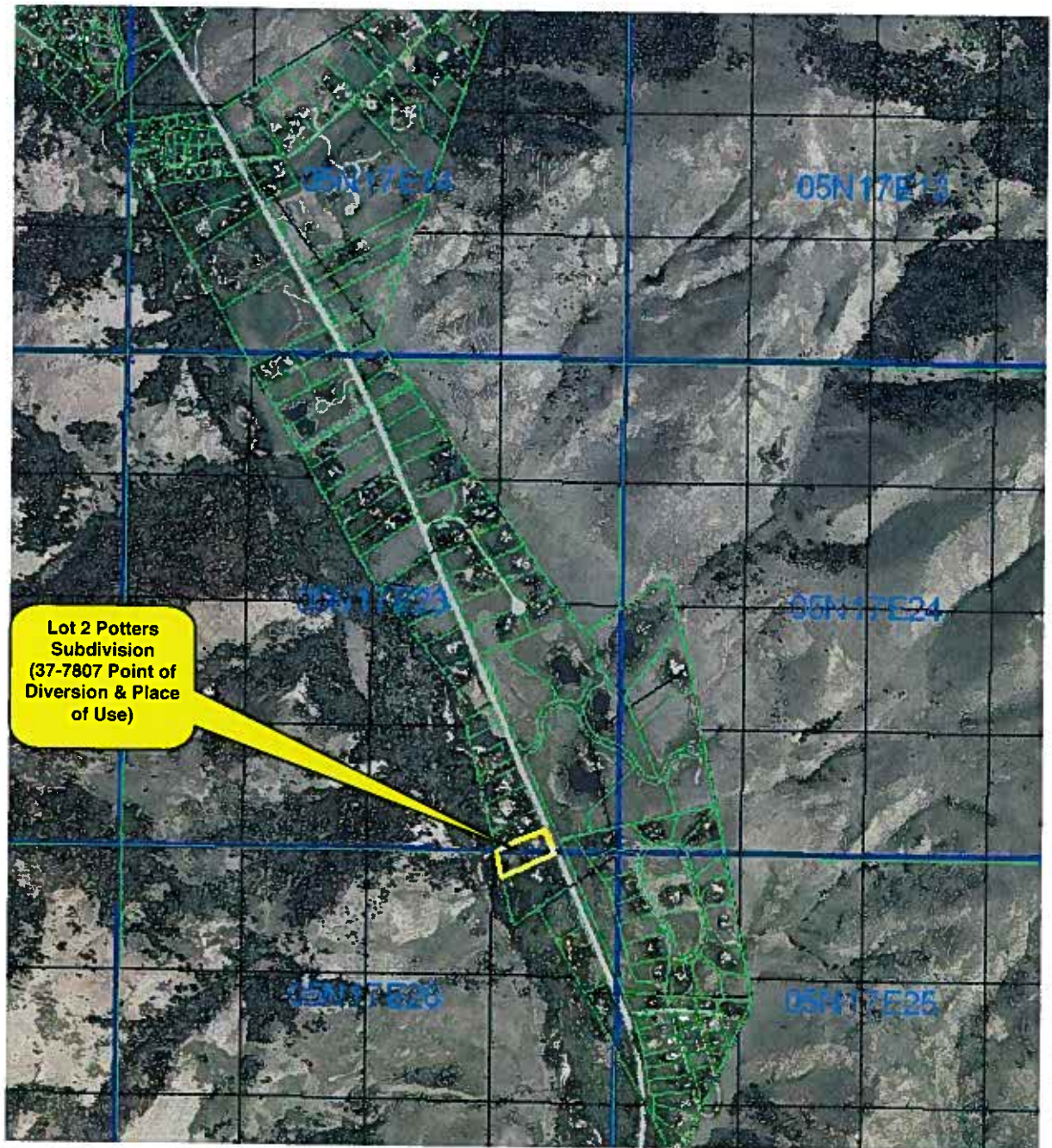


ABOVE & BELOW: Panoramic views of 37-7807 place of use on Lot 2 of Potters Subdivision showing domestic use and irrigation. View above is taken from Highway 75 looking west across Lot 2 of Potters Subdivision, towards the Big Wood River (not visible in background of view). View below is within Lot 2 of Potters Subdivision, probably looking to the south.



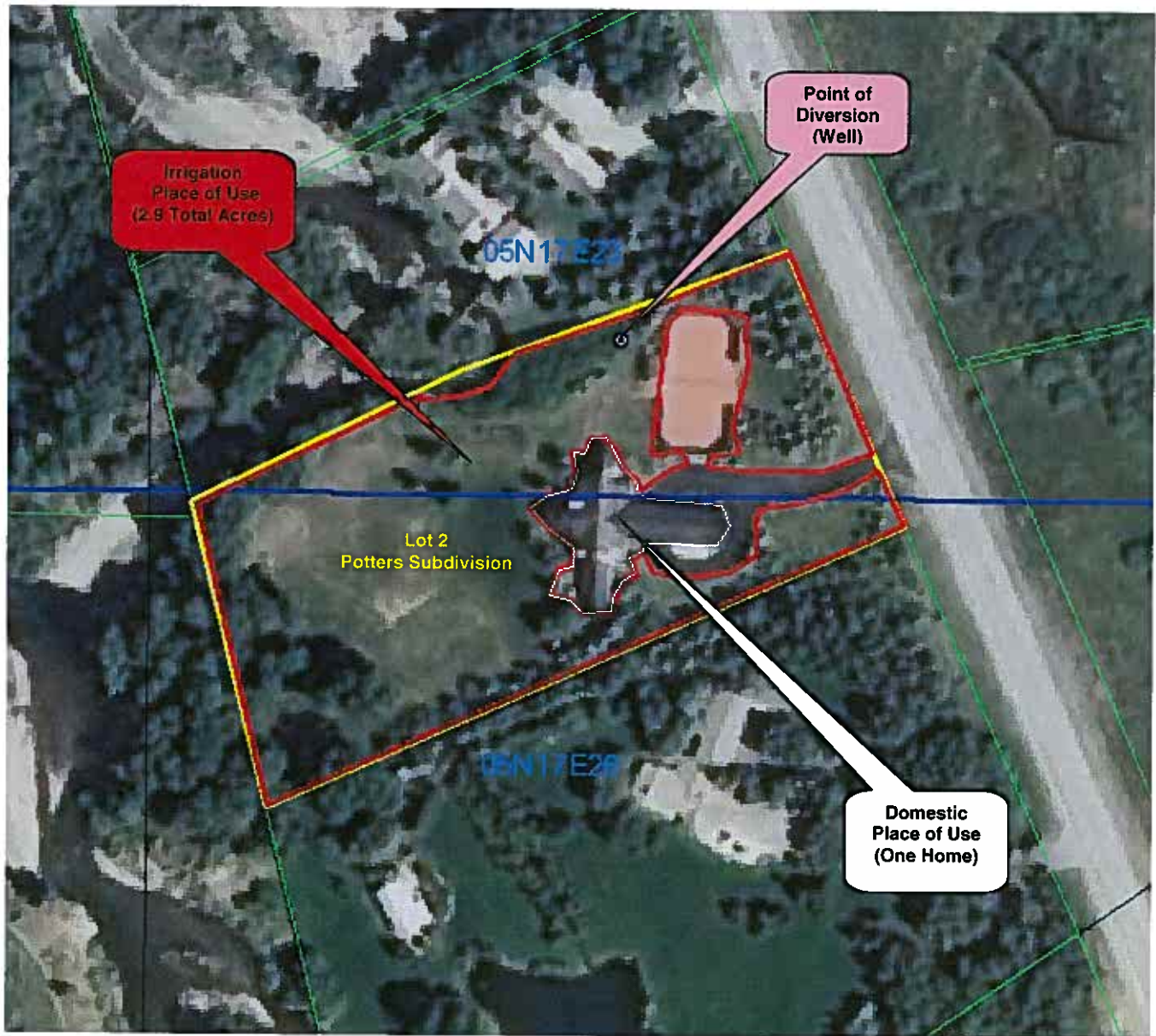
BELOW: View of the well that serves as the point of diversion for 37-7807.



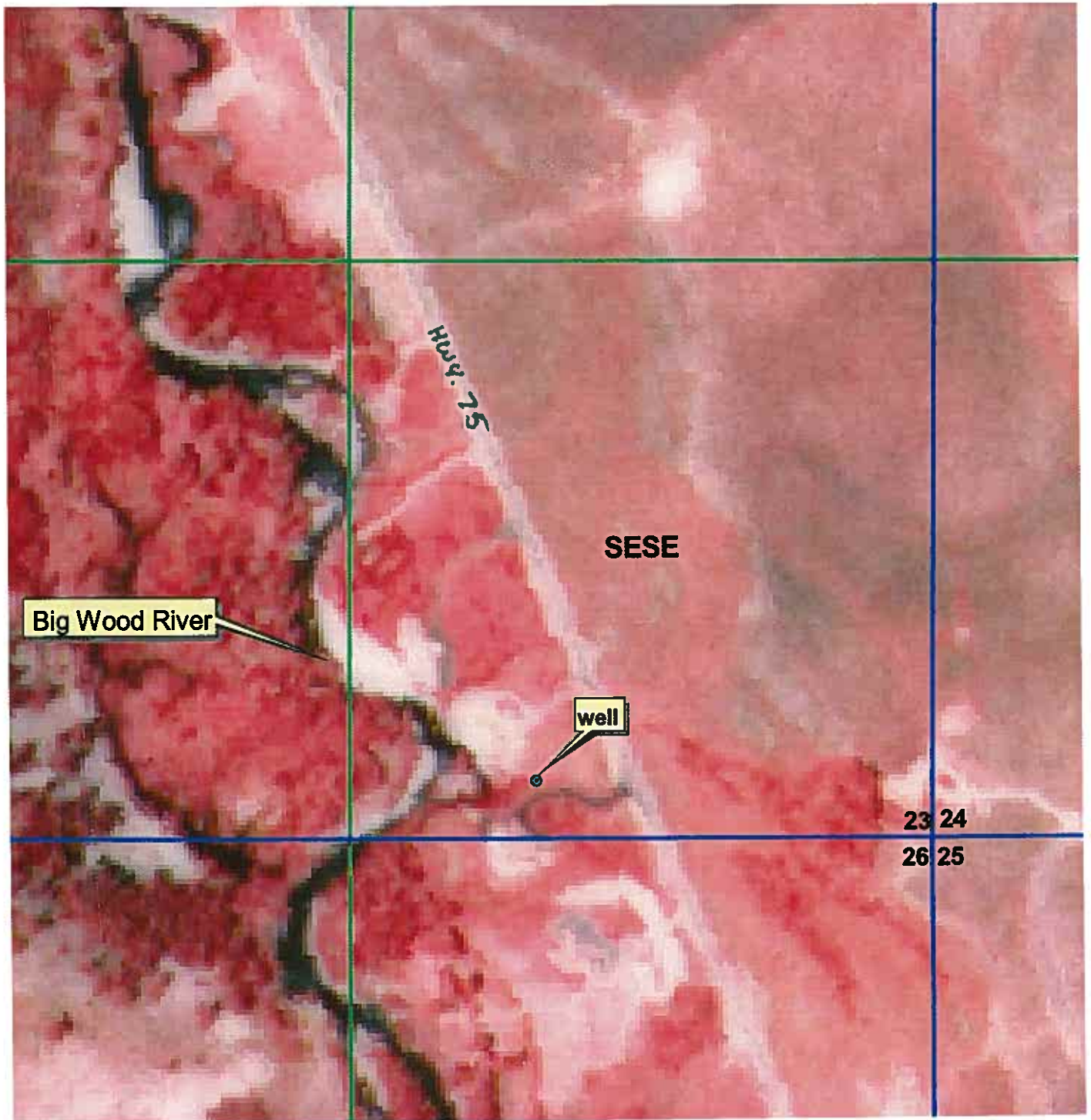


Lot 2 Potters
Subdivision
(37-7807 Point of
Diversion & Place
of Use)

37-7807 Point of Diversion and Place of Use



Idaho Department of Water Resource
Permit - 37-7807
David Squier
T05N, R17E



1987/1988 NAPP Photography

Waypt. 34

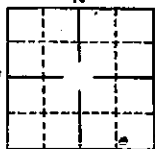
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T05N, R17E

23



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
BALLPOINT PENState law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>ROBERT POTTERS</u> Address <u>P.O. Box 1589, SUN VALLEY, IDA</u> Owner's Permit No. _____		7. WATER LEVEL Static water level <u>3</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ of Quality _____																																																					
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____		8. WELL TEST DATA ☐ Pump ☒ Bailer ☐ Air ☐ Other _____																																																					
3. PROPOSED USE ☒ Domestic ☒ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)		9. LITHOLOGIC-LOG 83176																																																					
4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____		<table border="1"><thead><tr><th rowspan="2">Hole Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>6"</td><td>0</td><td>3</td><td>BLACK GRAVEL & SANDY SOIL</td><td></td><td></td></tr><tr><td>"</td><td>3</td><td>15</td><td>LARGE BOULDERS & GRAVEL</td><td>X</td><td></td></tr><tr><td>"</td><td>15</td><td>19</td><td>GRAY SANDY CLAY</td><td>X</td><td></td></tr><tr><td>"</td><td>19</td><td>28</td><td>BROWN SAND & CLAY</td><td>X</td><td></td></tr><tr><td>"</td><td>28</td><td>45</td><td>COARSE GRAVEL</td><td>X</td><td></td></tr><tr><td>"</td><td>45</td><td>49</td><td>PEA GRAVEL</td><td>X</td><td></td></tr><tr><td colspan="6">NOTE: BEDROCK AT 53! PIPE PULLED BACK TO 49.</td></tr></tbody></table>		Hole Diam.	Depth		Material	Water		From	To	Yes	No	6"	0	3	BLACK GRAVEL & SANDY SOIL			"	3	15	LARGE BOULDERS & GRAVEL	X		"	15	19	GRAY SANDY CLAY	X		"	19	28	BROWN SAND & CLAY	X		"	28	45	COARSE GRAVEL	X		"	45	49	PEA GRAVEL	X		NOTE: BEDROCK AT 53! PIPE PULLED BACK TO 49.					
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5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other Thickness _____ inches Diameter _____ inches From _____ feet To _____ feet Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches Number _____ From _____ feet To _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>18</u> Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings Sealing procedure used: ☒ Slurry pit ☐ Temp. surface casing ☐ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port _____		10. Work started <u>24 MAY 83</u> finished <u>25 MAY 83</u>																																																					
6. LOCATION OF WELL Sketch map location must agree with written location.  Lot No. <u>4</u> Block No. _____ County <u>BLAINE</u>		11. DRILLERS CERTIFICATION <u>00</u> I/We certify that all minimum well construction standards were compiled with at the time the rig was removed. <u>RAY ROESSLER</u> Firm Name <u>WELL DRILLERS</u> Firm No. <u>262</u> <u>125 5TH AVE E.</u> Address <u>GOODWIN, IDA 83330</u> Date <u>26 MAY 83</u> Signed by (Firm Official) <u>Ray Roessler</u> and (Operator) <u>Ray Roessler</u>																																																					