

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 85-7617

Exam Date: 5/15/2012

1. Current Owner: LAVELLI WATERS ROAD ASSN
19785 WINDY LN
LENORE ID 83541-6184
(208)836-5438
2. Accompanied by: Lynda Martin
Phone No: (208)836-5438
Address: 19741 Pinehaven Ln., Lenore, ID 83541
Relationship to Permit Holder: resident and secretary of the association
Other Contact Person: Hank Greber 19785 Windy Ln., Lenore, ID 83541 (208)836-5628

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None. 86-10826 Clearwater River/USA (stockwater), and 85-11240 Spring/Bette Summers (stockwater)
2. Other water rights with the same point of diversion: None. 85-11240 Spring/Bette Summers; 86-10479 Spring/Francine Grant (domestic/stockwater).

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

GROUND WATER L8 NE1/4SE1/4 Sec. 36, Twp 37N, Rge 02W, B.M. NEZ PERCE County

Method of Determination: Garmin GPS Map 76S, Arc Map 2011

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	
37N	01W	31									X L 3		X L 4	X L 5					
37N	02W	36													X L 8			X	

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	
37N	01W	31									3.4 L 3	4.6 L 4							8.0
37N	02W	36															2.0		2.0

Total Acres: 10

Method of Determination: Garmin GPS Map 76S, Arc Map 2004 – 2011, and Bing Maps (to help determine historical irrigation patterns. Arc Map 2004 – 2011 to determine domestic, and Survey No. 549646.

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>
A0016955	Franklin Electric (submersible)	10	Hp Serial No. 2822029330	buried	4 inch to 20,000 gallon storage tank

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

D. FLOW MEASUREMENTS

1. Measurements:

At the time of the field examination, no physical measurement could be collected that would be representative of the well, since there is a 4 inch buried discharge to 4 inch buried pipe that runs up the hill to where the 20,000 gallon storage tank is located. There is a 2 inch overflow that runs to a ditch and then sinks (no flow at the time of the field examination), and a buried line that runs down the hill and then splits into (2) 2-inch mains, before reducing to 1 ¼ inch going onto the property. At each property there is a pressure reducer valve, and for this reason the frost free hydrant on the property when measured with a 5 gallon bucket, the following information was obtained:

(5 gal. X 60 sec)/9 sec = 33.3 gpm X 0.00223 = 0.07 cfs (while other households were irrigating their property

Domestic Maximum Instantaneous Water Requirement for Domestic Internal Only Use 8-homes (Exh 12) = 0.13 cfs

Pipe Conversion for 4 inch pipe:

$Q = 5 \times 3.1416 \times [(diameter/12)/2]^2 \times \text{squared} = 0.44 \text{ cfs}$

Irrigation:

0.02 cfs X 10 acres = .20 cfs maximum allowed

Theoretical (50 ft well lift + 100 ft elevation lift to storage tank = 150 ft lift):

IDWR standard domestic internal/external @30 psi = $(8.8 \times 10 \text{ Hp} \times 0.7 \text{ eff}) / \{150 \text{ ft lift} + (30 \text{ psi} \times 2.31)\} = 0.28 \text{ cfs}$

@40psi (Domestic with 5 – 10 acres; or medium irrigation systems up to 50 acres)= 0.25 cfs

Well Drillers Report:

100 gpm X 0.00223 = 0.22 cfs

RECOMMEND:

Allow 0.20 cfs as the capacity of the system, unless the HOA can submit proof (measurements) that the rate is higher.

Domestic internal use only for 8 homes (TR 5, 6, 7, 8, 12, 14, 16, 17, 18) = 0.13 cfs

Irrigation for 10 acres found only in TR 6, 7, 8, 14, 16, 17, 18: 0.20 cfs (as permitted)

Total Diversion Rate: 0.20 cfs

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

$$V_{I.R.} = (10.0 \text{ Acres Irrigated}) \times (3.5 \text{ Irrigation Requirement}) = 35.0 \text{ af}$$

$$V_{D.R.} = [0.20 \text{ Diversion Rate (cfs)}] \times (246 \text{ Days in Irrigation season}) \times 1.9835 = 97.6 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 35.0 \text{ af}$$

2. Volume Calculations for Domestic Use:

IDWR standard for domestic internal use only = 0.6 af/home.

Domestic internal use only for 8-homes (TR 5, 6, 7, 12, 14, 16, 17, 18) = 0.6 X 8 homes = 4.8 af

RECOMMEND:

Irrigation 10 acres found only in TR 6, 7, 14, 16, 17, 18 only (no evidence of irrigation found in TR 5 and 12).

Irrigation = 35.0 af

Domestic = 4.8 af

Total Annual Volume: 39.8 af

F. NARRATIVE/REMARKS/COMMENTS

The POD ID Tag No. A0016955, is located slightly off of Hwy 12, at milepost marker 30 (located on Lot 9). The well was drilled 12/28/1992 by Uhlenkott Drilling. The well has a 6 inch casing (extending 29 inches above ground level); is 115 ft deep, has a 40 ft static; 2 inch discharge to 2 inch main that runs up the hillside to a semi-buried 20,000 gallon storage located on TR 22. From the storage tank is a 2 inch line that discharges to a 2 inch buried main that reduces to 1 1/4 inch on each of the TR 5, 6, 7, 12, 14, 16, 17, and 18. At the storage tank, there is a 2 inch overflow that goes to a ditch and sinks (in the event there is overflow). Each lot has a pressure reducer valve prior to entering the individual lot. The well has a 10 Hp Franklin Electric (model #2822029330) submersible pump. There was no way to obtain a physical measurement directly from the well (without digging down to the buried line). There was no way to take a physical measurement of the discharge going into the storage tank. A physical measurement was taken at the home of Lynda Martin 19741 Pinehaven Ln., Lenore, ID 83541 (208)836-5438, which was 0.07 cfs and 20 psi (this is not a measurement for this water system though, but rather it is the flow off the storage tank). For this reason, a theoretical calculation on the well, and pipe conversion will be used to determine the capacity of the system. The only other alternative would be if the residents submit some evidence that the diversion rate from the well is higher. This community water system is not a regulated public water system yet, since there are only 8 connections on the system at the present time. Irrigation was only found on TR 6, 7, 14, 16, 17, and 18. There was no evidence of any irrigation on TR 5, and 12. Irrigation is accomplished with frost free hydrants, hoses, and misc nozzles.

The subdivision is called Redheart Ridge Subdivision, but on all the tax lot information which was updated on 1/13/2013, it does not reference the subdivision name, so for this reason, it was not listed on AdHoc. Instead Survey No. 549646 is referenced.

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	0.130 CFS	4.80 AF
IRRIGATION	03/15 to 11/15	0.200 CFS	35.00 AF
<u>Totals:</u>		0.200 CFS	39.80 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

Sandy Hemenway Date 2/5/2013



POU



POD:

AD0016952

6" casing
extends
29" above
ground
level,
Franklin
Electric
Submersible
10 HP
model #
282202931
115' deep,
40' static
4" discharge
drilled
12/28/1992
Uhlenkott
Drilling
Hwy 12
milepost
30

85-7617

S. Hemerway



POU
Domestic
+
irrigation
for
tracks
5, 6, 7,
12, 14,
16, 17,
18

05/15/2012



POU
Domestic
interior
8 homes

Irrigation
for
yards,
gardens
Landscaping
accomplished
with
frost free
hydrants
and mist
nozzles
+ some
built in
sprinkle
systems

05/15/2012



well
pumps
via
4" buried
pipe
to
20,000
gallon
storage
tank
semi-
buried
Located
on
TR 22

05/29/2012



2"
overflow
to a
ditch,
then
sinks.

A 2"
discharge
to a
2" main
that
splits
to the
different
lots,
then
reduces
to 1 1/4"
at each
Lot.

05/29/2012

85-7617

S. Hemerway



20,000
gallon
storage
tank

05/29/2012

Looking west, from the bottom of TR. 22, to the
20,000 gallon storage tank.



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

**USE TYPEWRITER OR
BALLPOINT PEN**

WELL DRILLER'S REPORT

State 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.

WELL OWNER

Name Dick Madley

Address 300 E Village Blvd. #10 238-57

Drilling Permit No. 85-92-N-110-000

Water Right Permit No. 85-7617

7. WATER LEVEL

Static water level 40 ft feet below land surface.

Flowing? ☐ Yes ☒ No G.P.M. flow _____

Artesian closed-in pressure _____ p.s.i.

Controlled by: ☐ Valve ☐ Cap ☐ Plug

Temperature _____ °F. Quality Good

Describe artesian or temperature zones below:

NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Well diameter increase ☐ Modification

☐ Abandoned (describe abandonment or modification procedures such as liners, screen, materials, plug depths, etc. in lithologic log, section 9.)

PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Monitor

☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

☐ Other _____ (specify type)

METHOD DRILLED

☒ Rotary ☒ Air ☐ Auger ☐ Reverse rotary

☐ Cable ☐ Mud ☐ Other _____

(backhoe, hydraulic, etc.)

WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness 2 1/2 inches Diameter 6 inches From 2 feet To 66 feet

_____ inches _____ inches _____ feet _____ feet

_____ inches _____ inches _____ feet _____ feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun

Size of perforation? _____ inches by _____ inches

Number _____ From _____ To _____

_____ perforations _____ feet _____ feet

_____ perforations _____ feet _____ feet

_____ perforations _____ feet _____ feet

Well screen installed? ☐ Yes ☒ No

Manufacturer _____ Type _____

Top Packer or Headpipe _____

Bottom of Tailpipe _____

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 9' Material used in seal: ☐ Cement grout

☒ Bentonite ☐ Pudding clay ☐ _____

Sealing procedure used: ☐ Slurry pit

☐ Temp. surface casing ☒ Overbore to seal depth

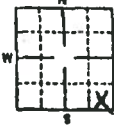
Method of joining casing: ☐ Threaded ☒ Welded

☐ Solvent Weld ☐ Cemented between strata

Describe access port Top of casing

11. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County Nez Perce

Address of Well Site _____

(give at least name of road)

SE 1/4 SE 1/4 Sec. 36 T. 37 N ☒ or S ☐

R. 1 E ☐ or W ☒

10.

Work started 12-27-92 finished 12-28-92

9. LITHOLOGIC LOG

Bore Diam.	Depth		Material	Water	
	From	To		Yes	No
8	0	66	C/sg - some Rock		
8	66	78	Med. H. Black Bslt.		
6	78	101	Black 2nd Brown Bslt (S&T)		
6	101	165	Black Bslt.		

RECEIVED

DEC 31 1992

NORTHERN REGION

I.D.W.R.

RECEIVED

AUG 22 1993

Department of Water Resources

OFFICE USE ONLY

Inspected by _____

Twp. 37N Rge. 2W Sec. 36E

JANE 1/4 SE 1/4

11. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Whelan Drilling Firm No. 125

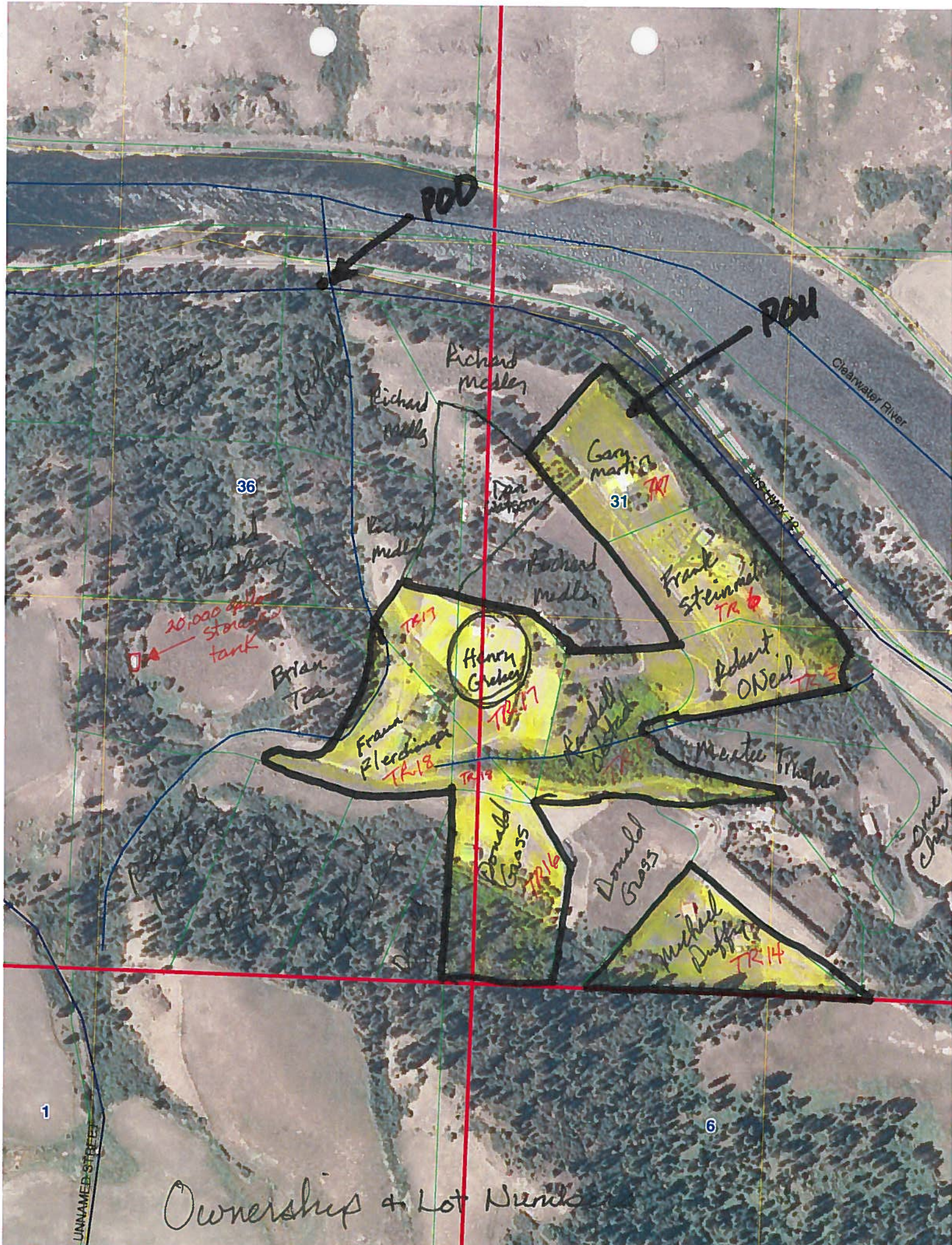
Address 1111 1st St. Date 12-29-92

Signed by Drilling Supervisor Jay Whelan

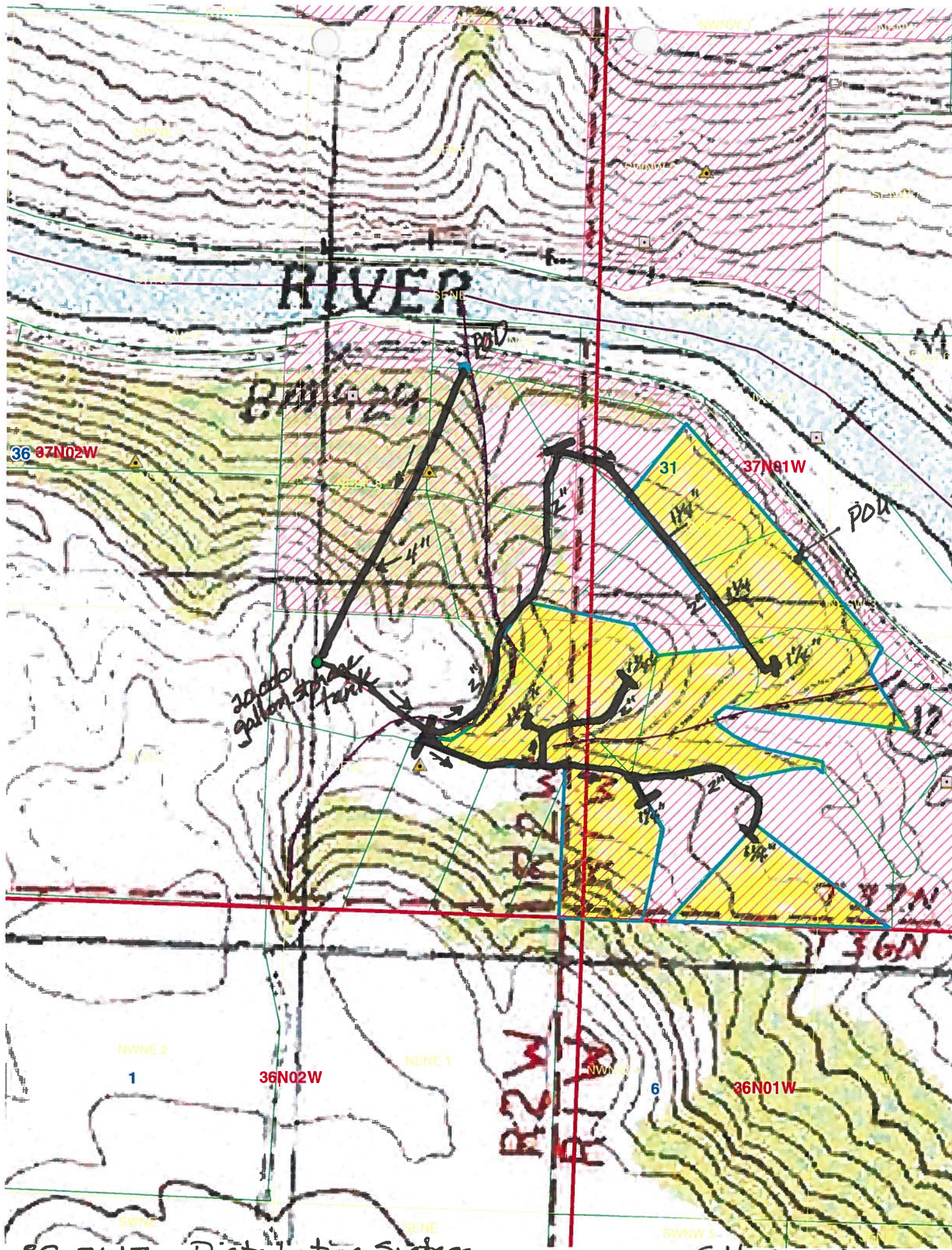
and _____

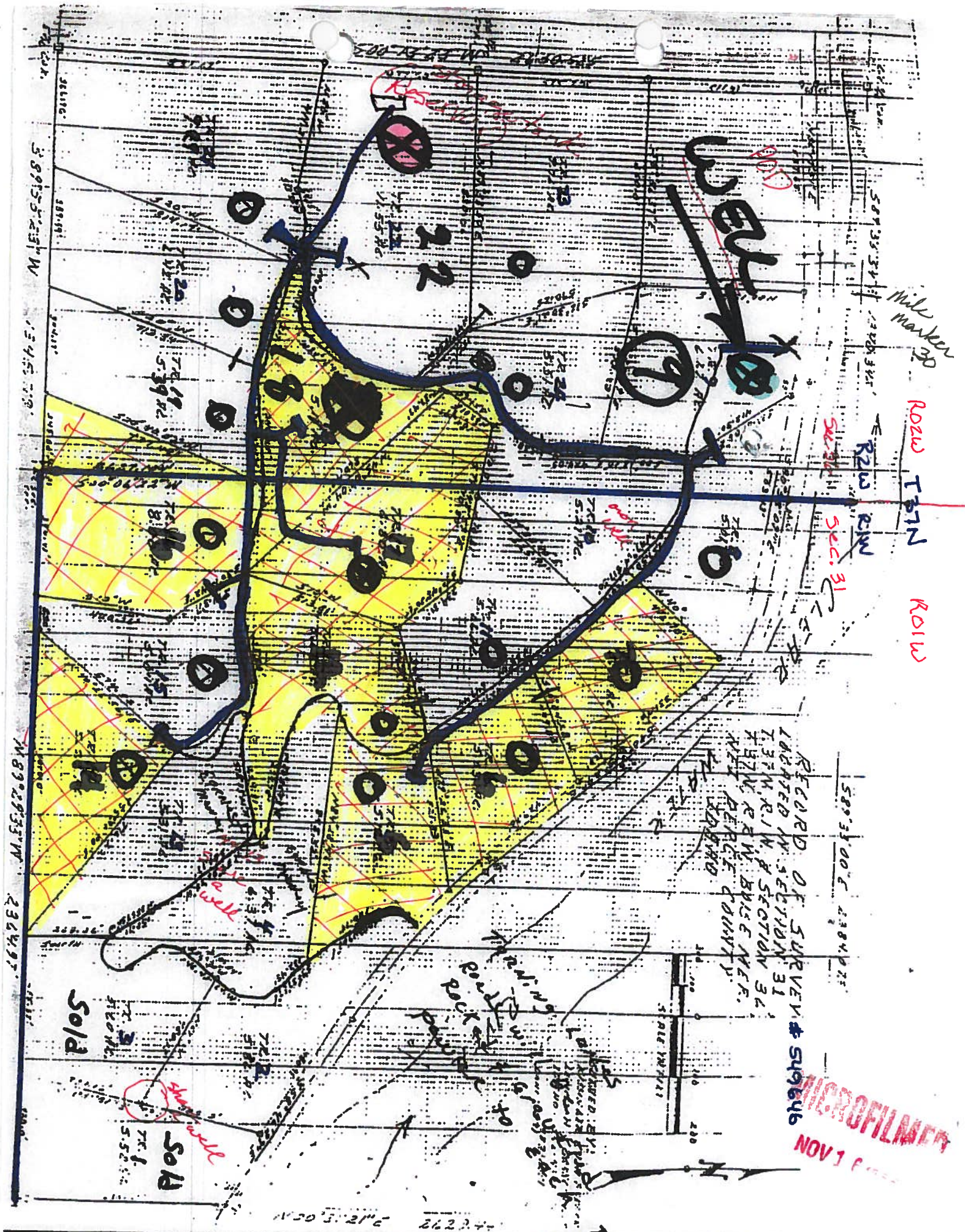
(Operator) Jim Whelan

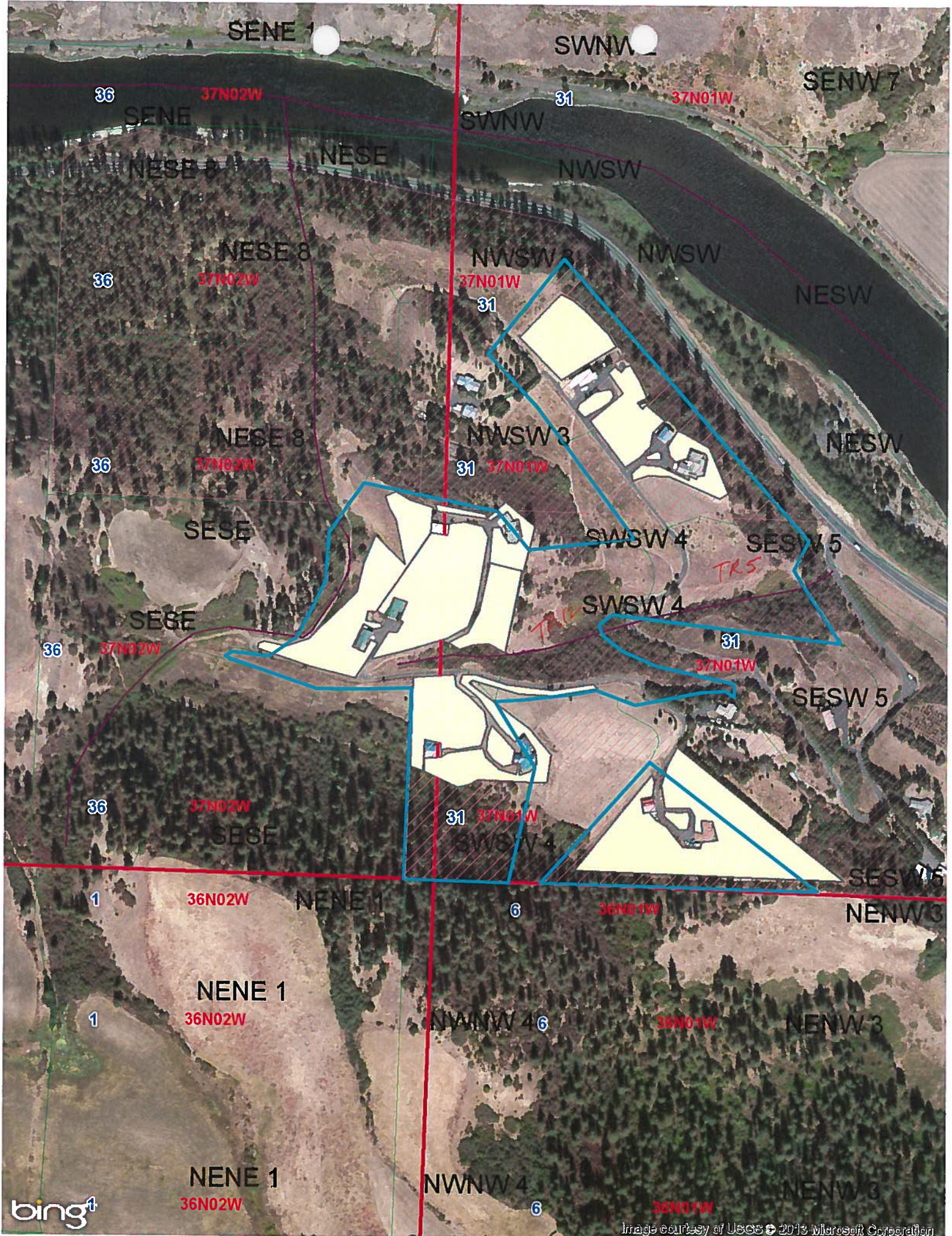
(If different than the Drilling Supervisor)

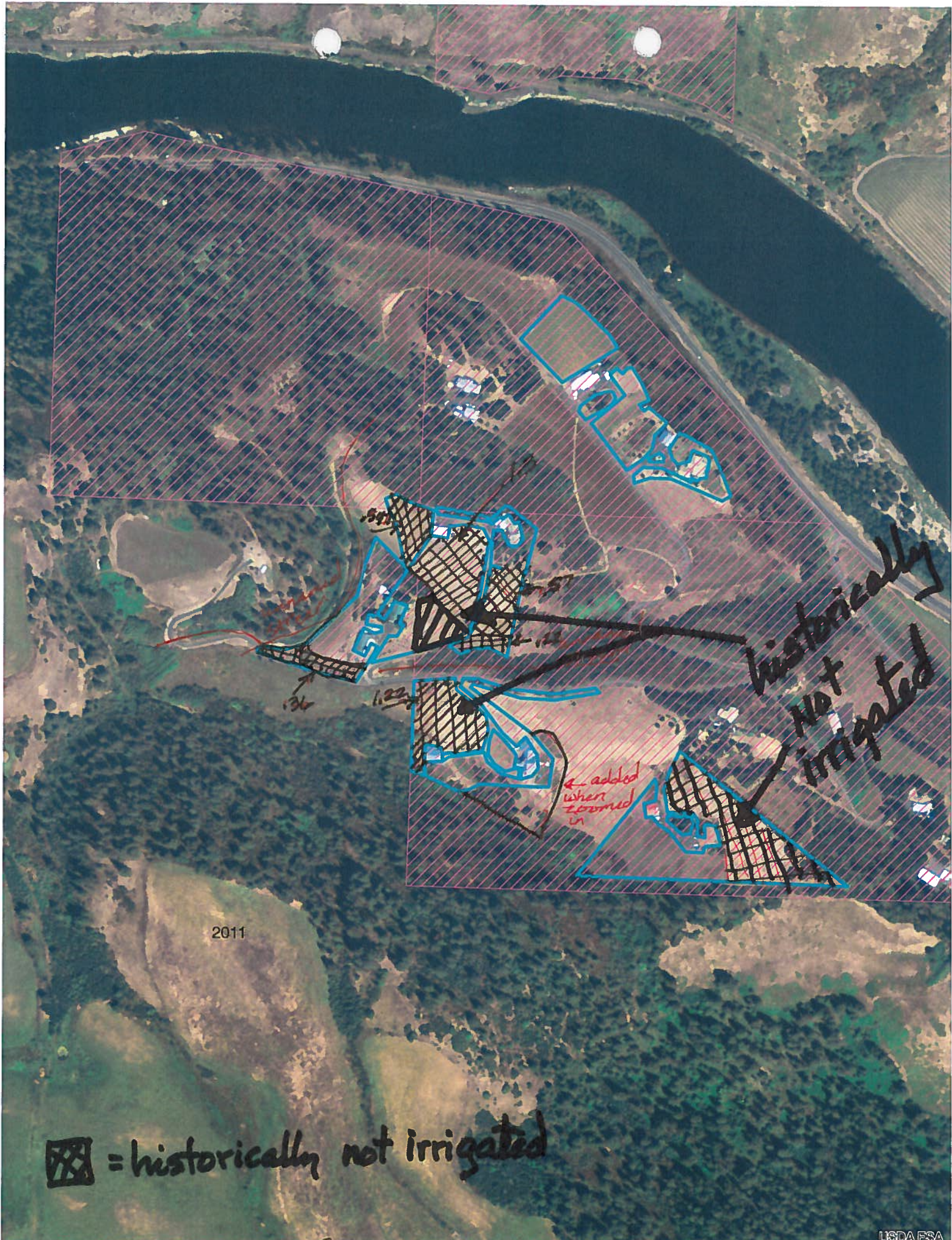


Ownership & Lot Numbers









2011

 = historically not irrigated