

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-10768

Exam Date: 6/15/2016

1. Current Owner:

CLYDE L EDWARDS 17484 N WILKINSON RD RATHDRUM ID 83858 (208)659-6340

And

TRACIE M EDWARDS 17484 N WILKINSON RD RATHDRUM ID 83858 (208)659-6340

2. Accompanied by: Clyde Edwards

3. **SOURCE:**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 95-11879

2. Other water rights with the same point-of-diversion: 95-11879

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

GROUND WATER NW¼NE¼ Sec. 27, Twp 52N, Rge 04W, B.M. KOOTENAI County

Method of Determination: GPS and maps. POD location at 47° 49.857, 116° 48.989 (A0015439)

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	
52N	04W	27		1.5															1.5

Total Acres: 1.5

Method of Determination: Google Earth and Arc map.

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
95-93-N-0226	FRANKLIN	1.5			

*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:

E. FLOW CALCULATIONS

Measured Method: UNABLE TO PERFORM FLOW MEASUREMENT. THEORETICAL PUMPING EQUATION ESTIMATES FLOW RATE AT 12.5 GPM OR 0.03 CFS. SEE ATTACHED SHEET.

_____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.5 \text{ AC} \times 3.0 \text{ AF} = 4.5 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \times 246 \times 1.9835 = 14.6 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 4.5 \text{ AF}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

Field exam with Mr. Edwards showed a well with 1.5 hp pump. Photo of well was blurry so not included in field exam photos. Field examiner verified well location with GPS and gave ID tag A0015439 to applicant. Well supplied water to home and the irrigation of 1.5 acres. Home is covered under Adjudication Recommendation 95-11879, so condition 928 will be put on license to limit irrigation to 1.5 acres. Irrigation was from well to automatic sprinklers around house and along driveway. Various frost free hydrants were located around property for various uses. On each side of driveway there were long runs of buried sprinklers in center of lawn. Hoses with sprinklers were used to cover any spots not covered by irrigation system. Unable to perform flow measurement, theoretical pumping equation estimates diversion rate 12.5 gpm or 0.03 cfs. License will issued at 0.03 cfs with annual volume of 4.5 acre feet. Season of use will be corrected at time of licensing to show proper irrigation season for that area.

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	03/15 to 11/15	0.03 CFS	4.5 AF
	<u>Totals:</u>	0.030 CFS	4.50 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 ☒ None

I. AUTHENTICATION

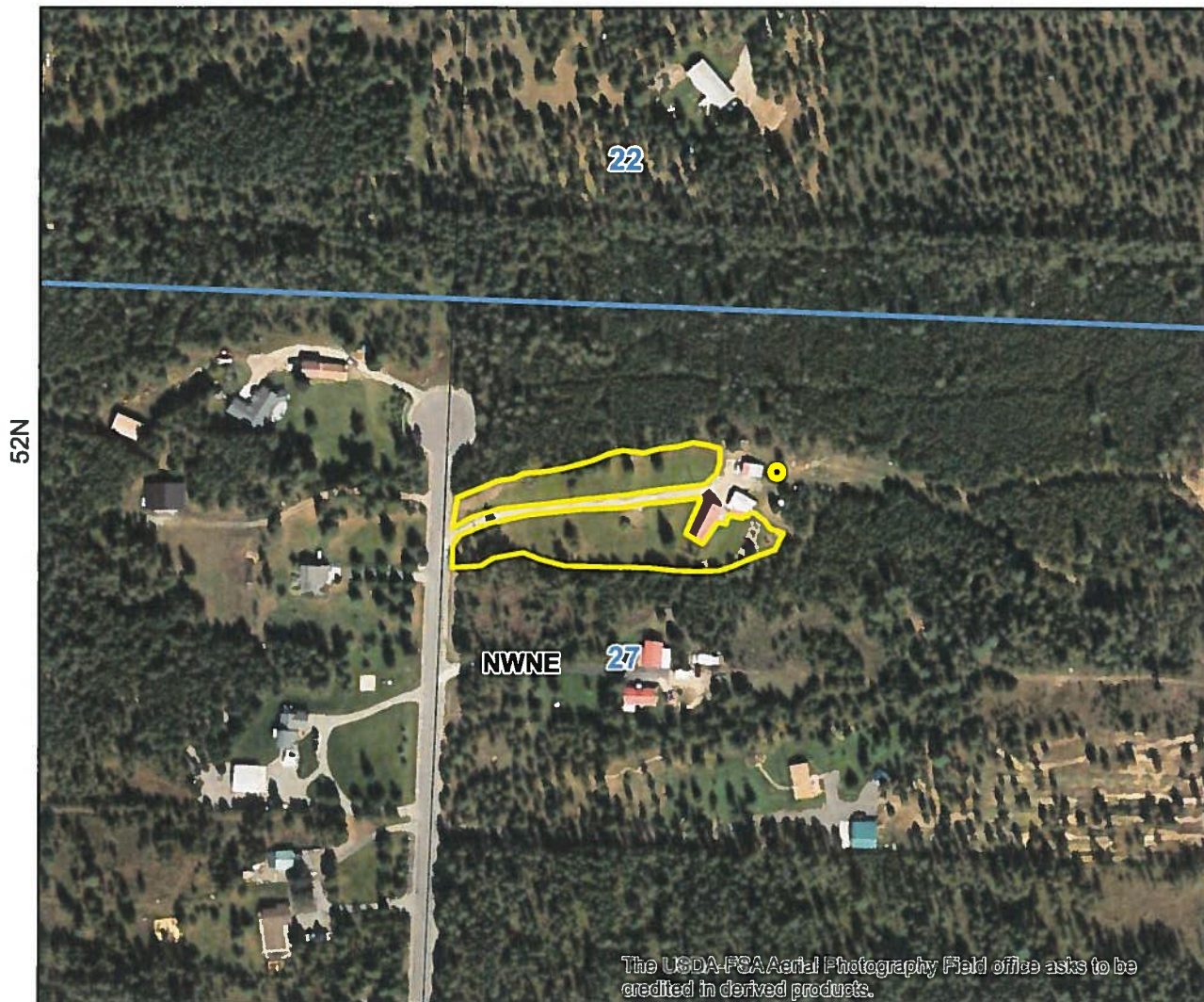
Field Examiner's Name Adam Fenduit Date 12-30-2016

Reviewer Morgan Case Date 1/12/2017

State of Idaho
Department of Water Resources
Water Right License
95-10768

IRRIGATION

04W



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

0 0.035 0.07 0.14 Miles





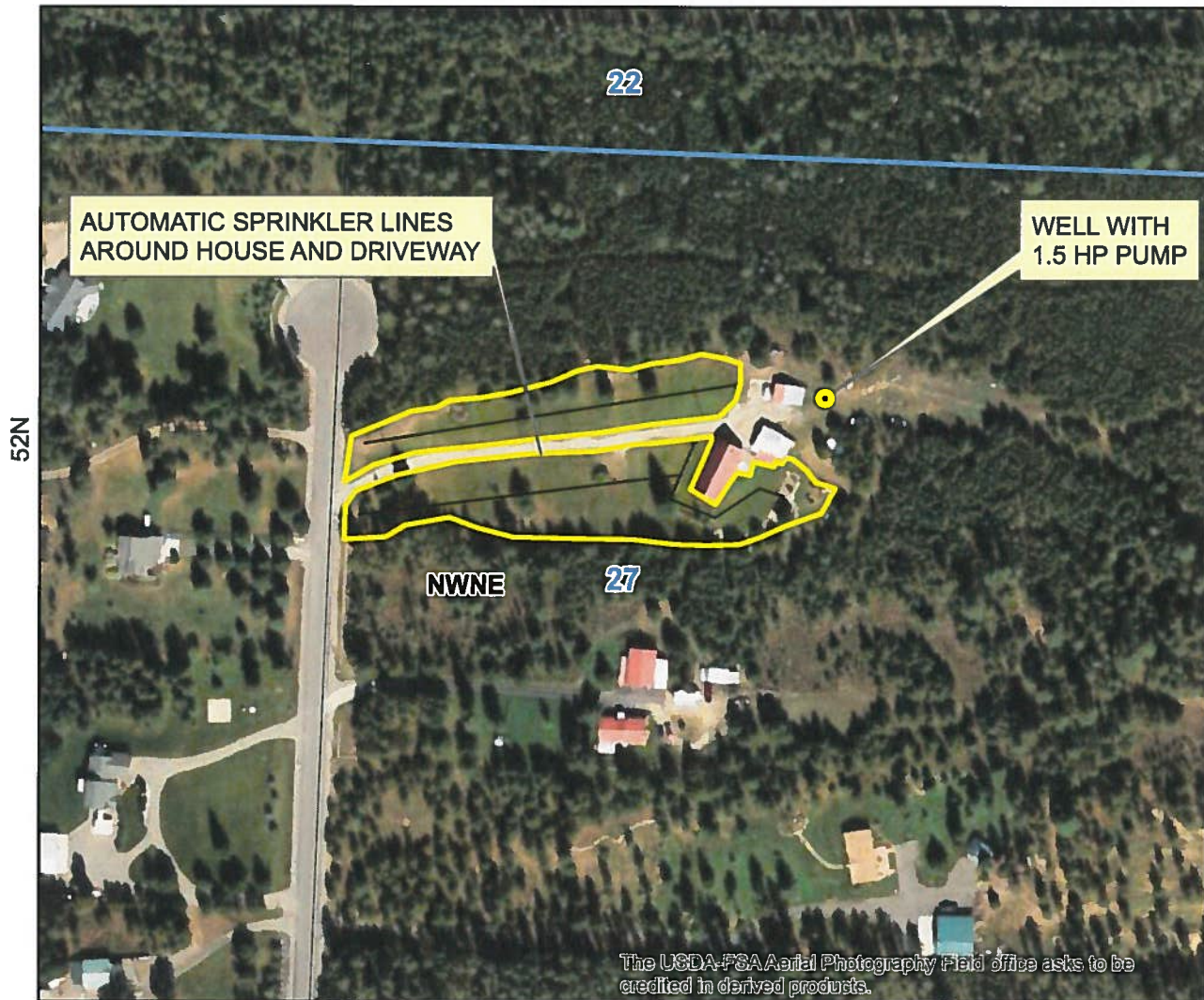
Google earth



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SYSTEM DIAGRAM

04W



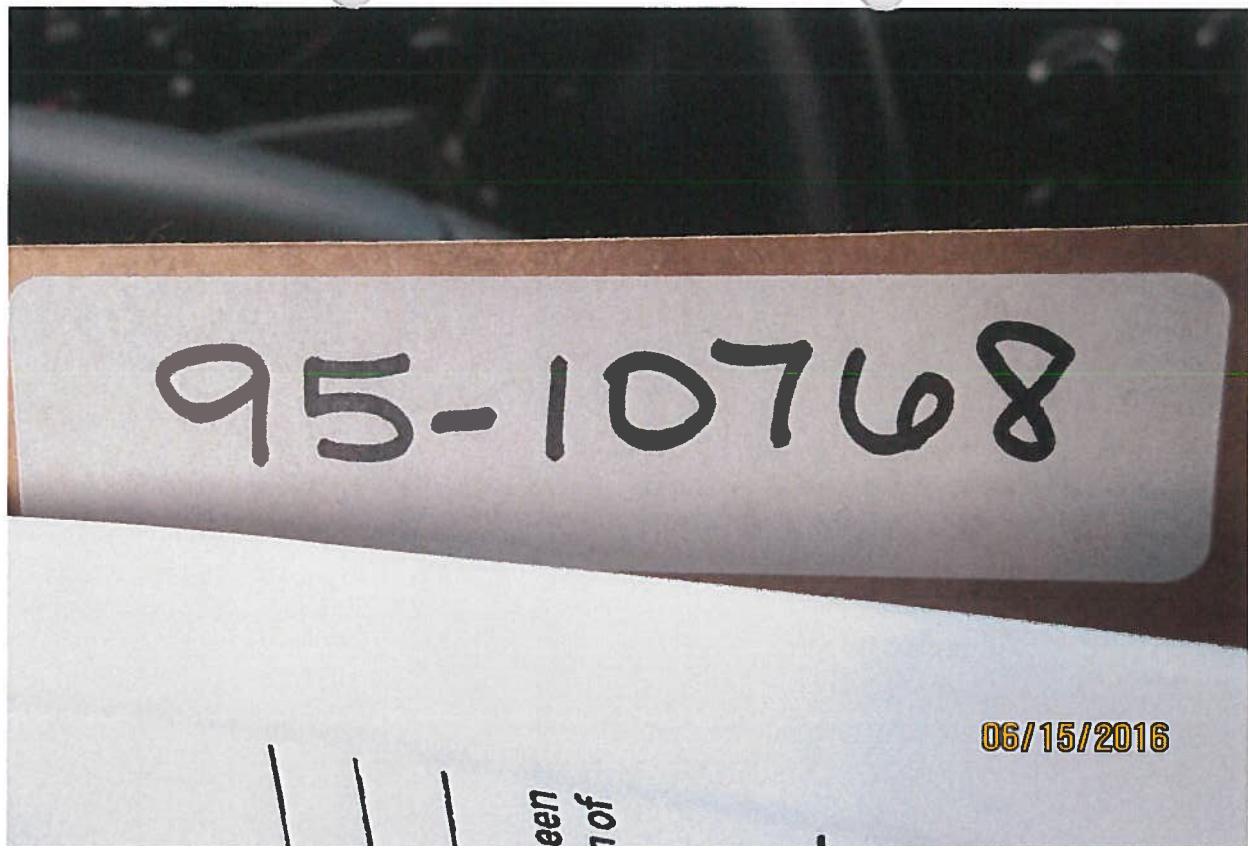
- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections

0 0.0225 0.045 0.09 Miles



Theoretical pumping equation for Water Right 95-10768. IDWR will assume pump is set at 287 feet and running at 40 psi.

PUMP EQUATIONS WATER RIGHT No.						
		95- 10768				
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	1.5	379.517	0.8	287	40
Q =		0.028 cfs 12.5 gpm				



Irrigated lawn on North side of driveway.



Hose connection used for irrigation.



Automatic irrigation sprinklers in from of house.



Irrigation along South side of driveway.



Irrigation sprinkler along driveway.



Irrigation sprinkler along driveway.



View from road looking at home and irrigation.