

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-11537

Exam Date: 8/7/2015

1. Current Owner:
SUNNY HILLS WATER ASSN INC 14205 N TAYLORS TERRACE RD HAYDEN LAKE ID 83835 (208)
772-6737

2. Accompanied by: John Peterson

3. SOURCE: COEUR D ALENE LAKE

TRIBUTARY: SPOKANE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 95-7937
2. Other water rights with the same point-of-diversion: 95-7937

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

GROUND WATER SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 4, Twp 51N, Rge 03W, B.M. KOOTENAI County

COEUR D ALENE LAKE L4 (SW $\frac{1}{4}$ NW $\frac{1}{4}$) Sec. 3, Twp 51N, Rge 03W, B.M. KOOTENAI County

Method of Determination: GPS and maps. Well location at 116° 42.258, 47° 47.938 (A0015482). Hayden Lake diversion at 116° 41.932, 47° 47.868.

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	
51N	03W	3							X L 4										
51N	03W	4	X L 1			X													

Method of Determination: GPS and maps.

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.

XX

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

X

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
D0003010	FRANKLIN	1.5			
	FRANKLIN	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 EQUATIONS ESTIMATE COMBINED FLOW RATES AT 50.1 GPM OR 0.11 CFS.

 Additional Computation Sheets Attached

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: DOMESTIC USE FOR 7 HOMES WITH THE IRRIGATION OF UP TO 1/2 ACRE PER HOME = 1.2 AF X 7 HOMES = 8.4 AF

G. NARRATIVE/REMARKS/COMMENTS

FIELD EXAM SHOWED APPLICANTS HAD TWO POINTS OF DIVERSION. ONE FROM HAYDEN LAKE WITH A 5 HP PUMP THAT WAS PUMPED UP HILL TO TREATMENT AND 8,500 GALLON STORAGE TANK. THE 2ND POINT OF DIVERSION WAS LOCATED THERE AND THAT WAS A WELL WITH A 1.5 HP PUMP. APPLICANTS SAID IT SERVED 7 HOMES AND WAS INTENDED TO SERVE A 8TH HOME THAT WAS NOT STUBBED OUT SO IDWR CANNOT GIVE CREDIT FOR THAT LOT. APPLICANTS WERE OK WITH CHANGING LICENSE TO DOMESTIC FOR 7 HOMES WITH IRRIGATION UP TO 1/2 ACRE PER HOME. THEORETICAL PUMPING EQUATIONS ESTIMATE BOTH DIVERSIONS COMBINE TO 50.1 GPM OR 0.11 CFS WITH AN ANNUAL VOLUME OF 8.4 AF. LICENSE WILL BE OVERLAPPED WITH WATER RIGHT 95-7937 FOR THE DIVERSION RATE OF 0.08 CFS WITH AN ANNUAL VOLUME OF 3.6 AF.

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	0.11 CFS	8.4 AF
	<u>Totals:</u>	0.110 CFS	8.40 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

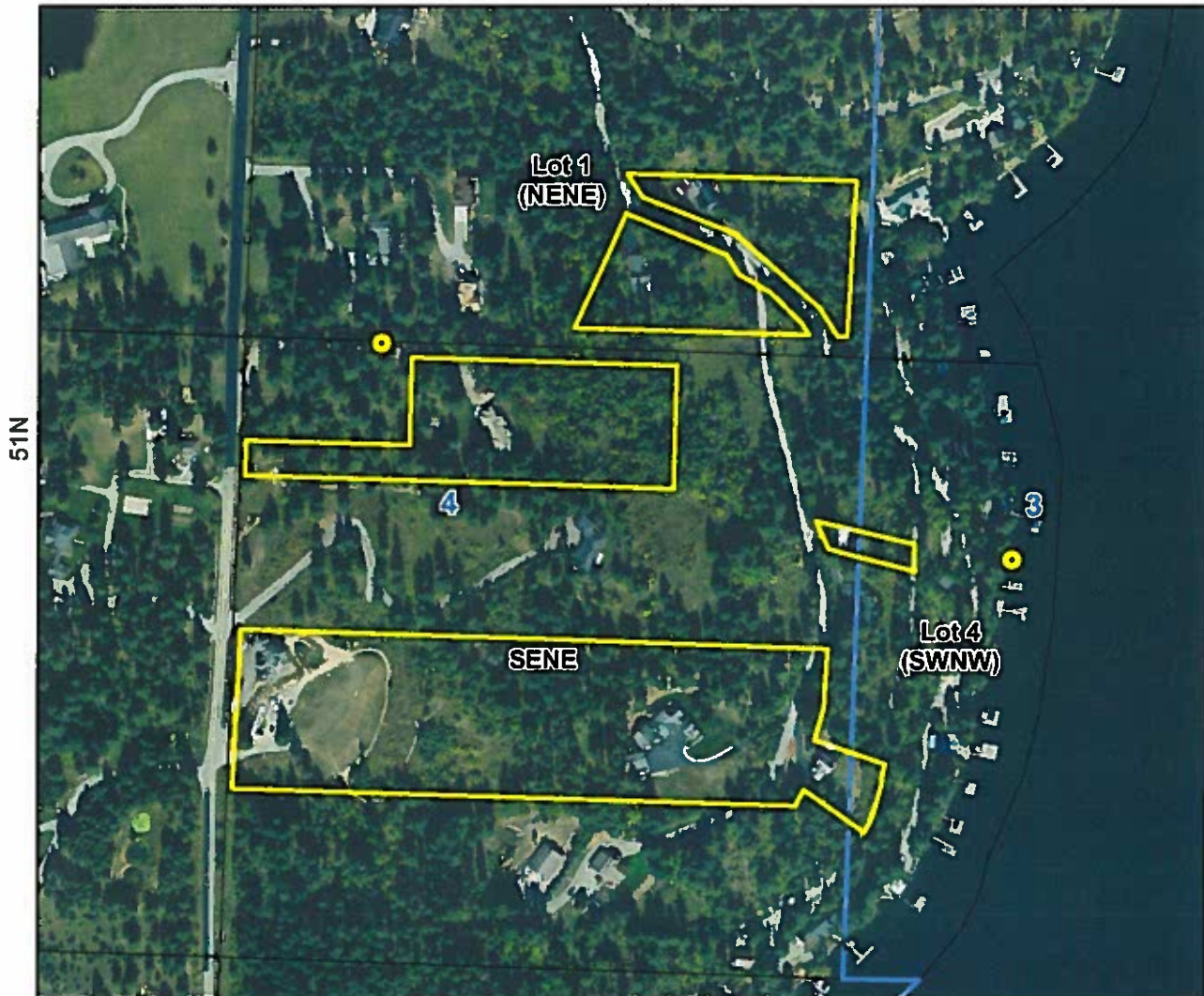
I. AUTHENTICATION

Field Examiner's Name Adam Friedman Date 3-4-2016

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Water Right License
95-11537

03W



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

0 0.0475 0.095 0.19 Miles



THEORETICAL PUMPING EQUATION FOR WATER RIGHT 95-11537

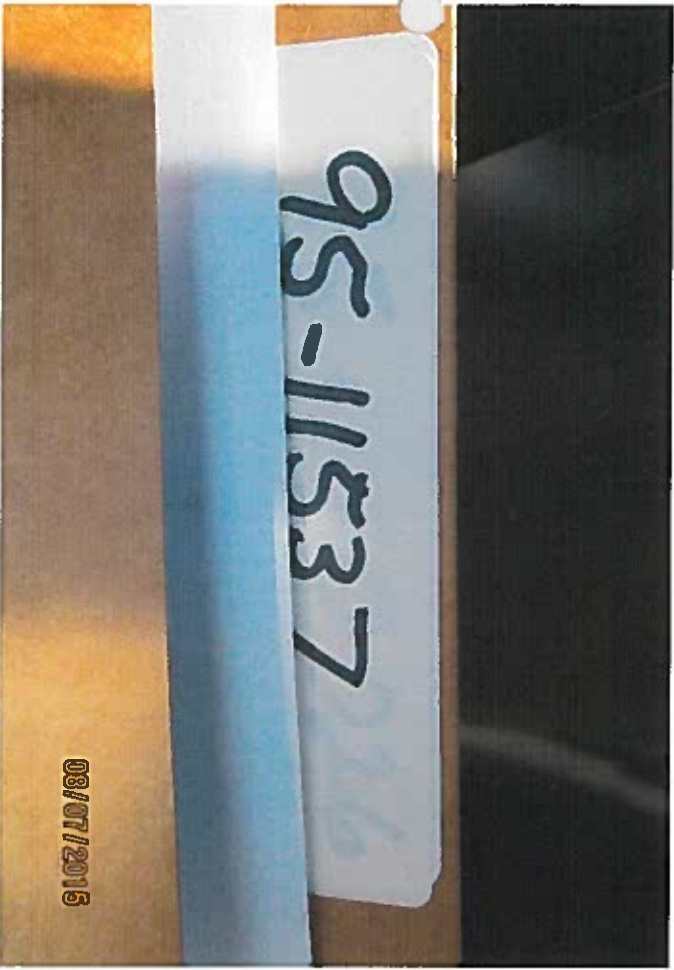
WELL D0003010 WITH 1.5 HP PUMP SET AT 46 PSI. IDWR WILL ASSUME PUMP IS SET AT 300 FEET.

PUMP EQUATIONS WATER RIGHT No. 95-11537						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	$\frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	1.5	406.394 6	0.8	300	46
Q = 0.026 cfs 11.7 gpm						

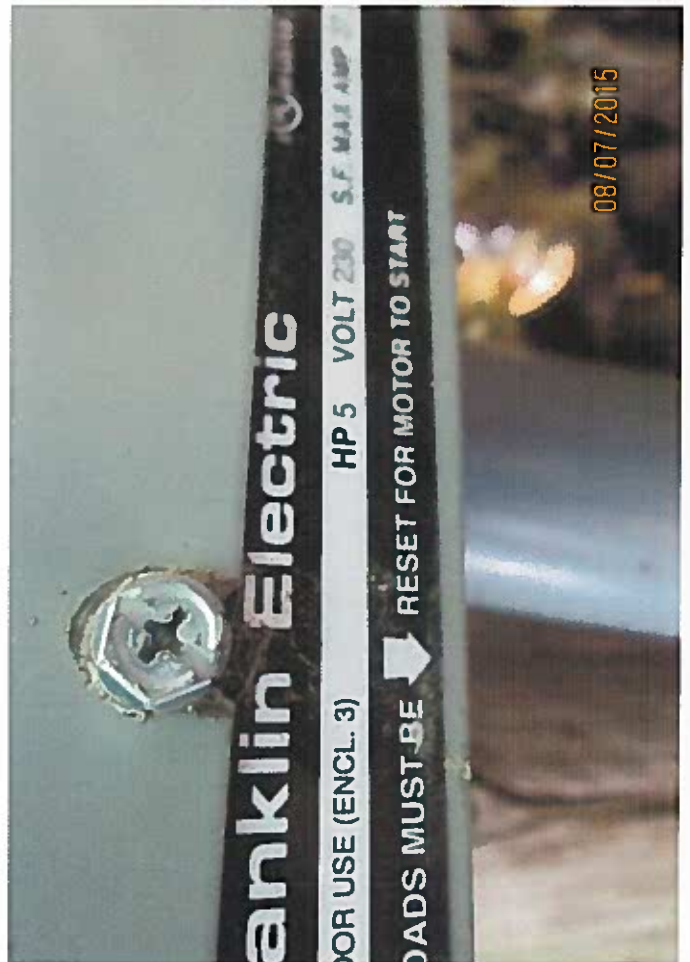
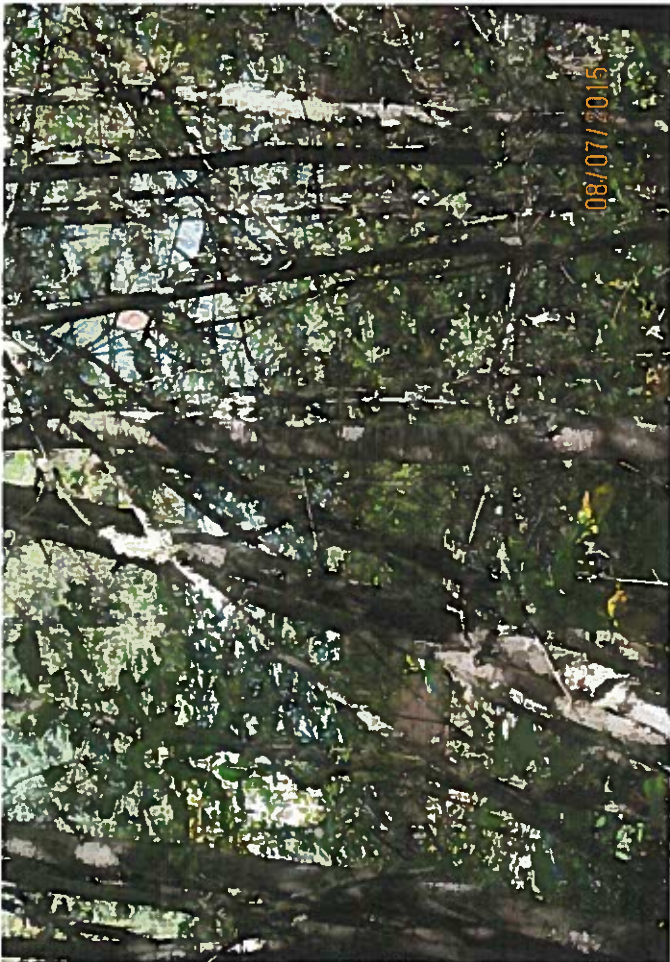
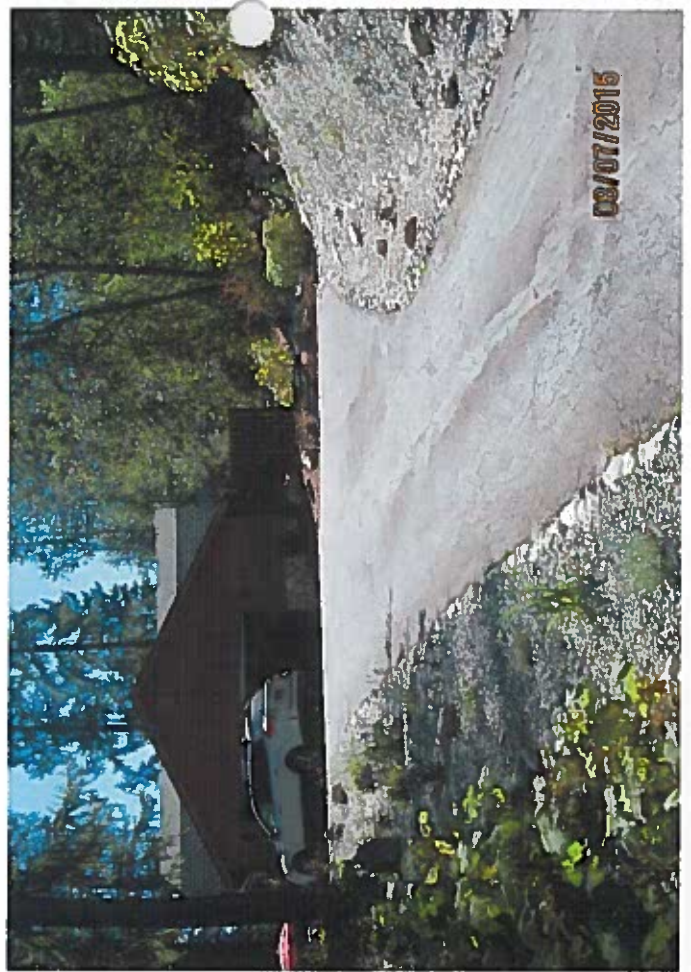
LAKE DIVERSION IS A 5 HP PUMP WITH UNKNOWN PSI SO IDWR WILL ASSUME 40 PSI. PUMPING HEIGHT WILL BE 320 FEET FROM LAKE TO STORAGE TANK.

PUMP EQUATIONS WATER RIGHT No. 95-11537						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	$\frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	5	412.51 7	0.8	320	40
Q = 0.085 cfs 38.4 gpm						

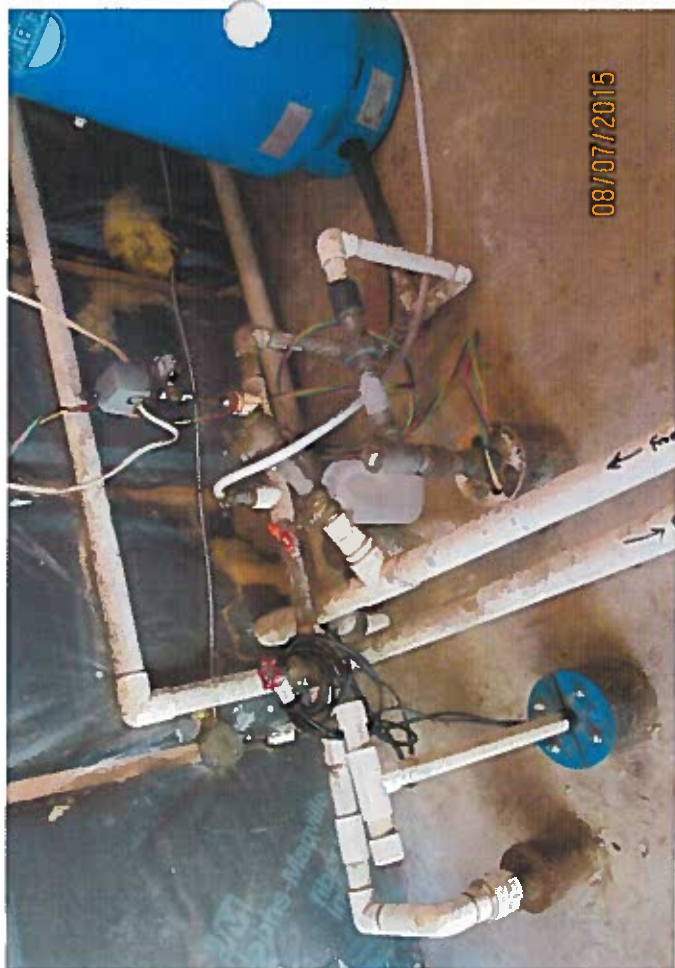
COMBINED DIVERSION RATE OF 50.1 GPM OR 0.11CFS.



95-11537



95-11537



95-11527



95-11527

