

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-16963

Exam Date: 6/4/2015

1. Current Owner: COUGAR CREST LODGE LLC
608 NW BLVD STE 300
COEUR D ALENE ID 83814
(208) 667-4000
2. Accompanied by: Foster
Relationship to Permit Holder: Owner

3. SOURCE**TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
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 NE1/4SE1/4 Sec. 24, Twp 50N, Rge 05W, B.M. KOOTENAI County

GROUND WATER L6 NE1/4SE1/4 Sec. 24, Twp 50N, Rge 05W, B.M. KOOTENAI County

Method of Determination: GPS and maps. POD location 47° 39.882, 116° 53.820 (A0015405) 47° 39.899, 116° 53.763 (A0015404)

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	
50N	05W	24														X			
																L 6			

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	
50N	05W	24															.5		
																	L 6		.5

Total Acres: 0.5

PLACE OF USE: FIRE PROTECTION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	05W	24															X		
																	L 6		

Method of Determination:

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</u> <u>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</u> <u>Size</u>
D0005760	FRANKLIN	5			
D0013676	FRANKLIN	5			

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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N/A

2. Measurements:

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

Measured Method: UNABLE TO FIND SUITABLE LOCATION TO PERFORM FLOW MEASUREMENT.
THEORETICAL PUMPING EQUATION ESTIMATES FLOW RATES AT 39.3 GPM AND 17.9 GPM OR COMBINED 0.13 CFS.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \text{ AC} \times 3 \text{ AF} = 1.5 \text{ AF}$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.5 \text{ AF}$$

2. Volume Calculations for Other Uses: DOMESTIC USE FOR 1 LODGE = 0.6 AF

G. NARRATIVE/REMARKS/COMMENTS

FIELD EXAM SHOWED 2 WELLS WITH A 5 HP PUMP IN EACH. NO PROPER PLACE TO HOOK UP FLOW METER. THEORETICAL PUMPING EQUATION ESTIMATES COMBINED FLOW RATE OF 0.13 CFS. APPLICANT HAD FOUR 3,000 GALLON STORAGE TANKS. DOMESTIC USE IS FOR LODGE AND WILL BE GIVEN 0.6 AF. IRRIGATION WILL BE DROPPED DOWN TO 0.5 ACRES. APPLICANT HAS A COUPLE OF SMALL YARD AREAS AND THE REST OF THE IRRIGATION IS ALL SPRINKLER AND DRIP IRRIGATION OF SHRUBS AND OTHER PLANTS. FIRE PROTECTION WILL BE REDUCED IN FLOW RATE TO 0.13 CFS.

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	0.040 CFS	0.60 AF
IRRIGATION	03/15 to 11/15	0.030 CFS	1.50 AF
FIRE PROTECTION	01/01 to 12/31	0.130 CFS	
<u>Totals:</u>		0.130 CFS	2.10 AF

2. Recommended Amendments

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

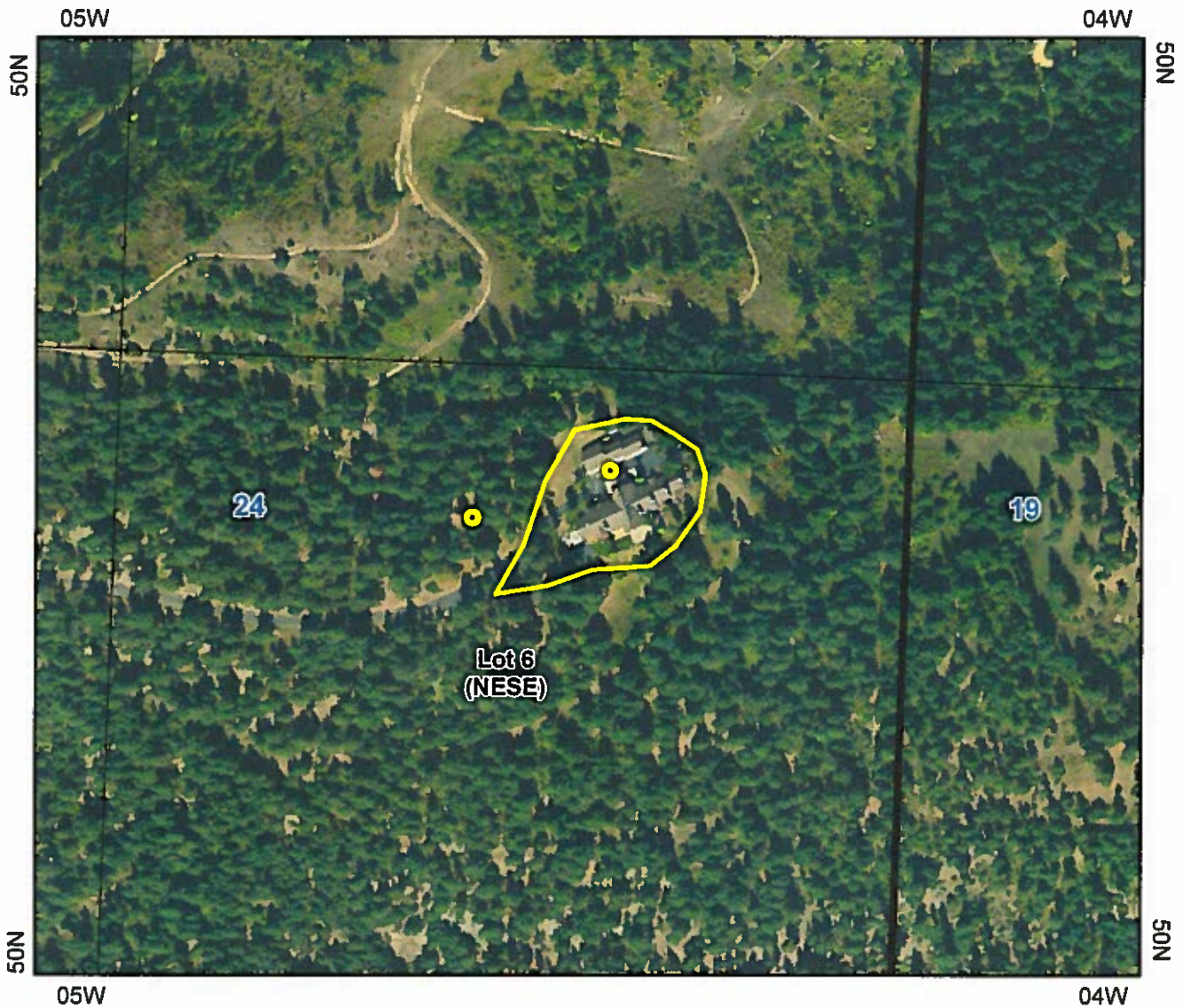
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name Adam Fendley Date 11-23-2015

Reviewer Beth K. Jankowski Date 11/25/2015

State of Idaho
Department of Water Resources
Water Right License
95-16963



0 0.035 0.07 0.14 Miles

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



THEORETICAL PUMPING EQUATIONS FOR WATER RIGHT 95-16963

PUMP EQUATIONS WATER RIGHT No. 95- 16963						
		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	402.51 7	0.8	310	40
Q = 0.088 cfs 39.3 gpm						

PUMP EQUATIONS WATER RIGHT No. 95- 16963						
		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	882.51 7	0.8	790	40
Q = 0.040 cfs 17.9 gpm						

0.13 CFS DIVERSION RATE



95-16963



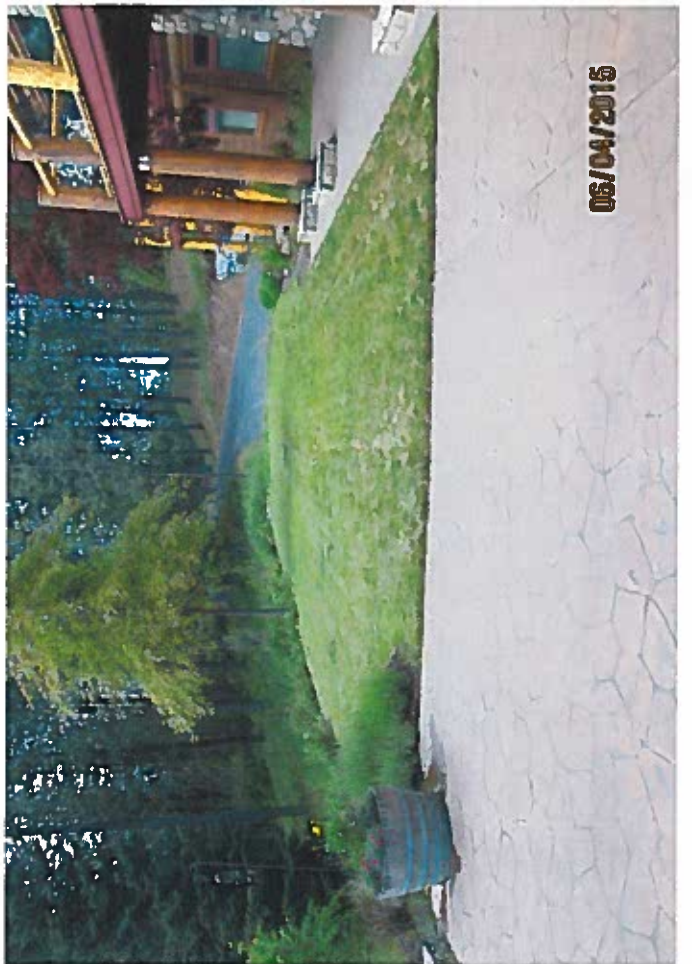
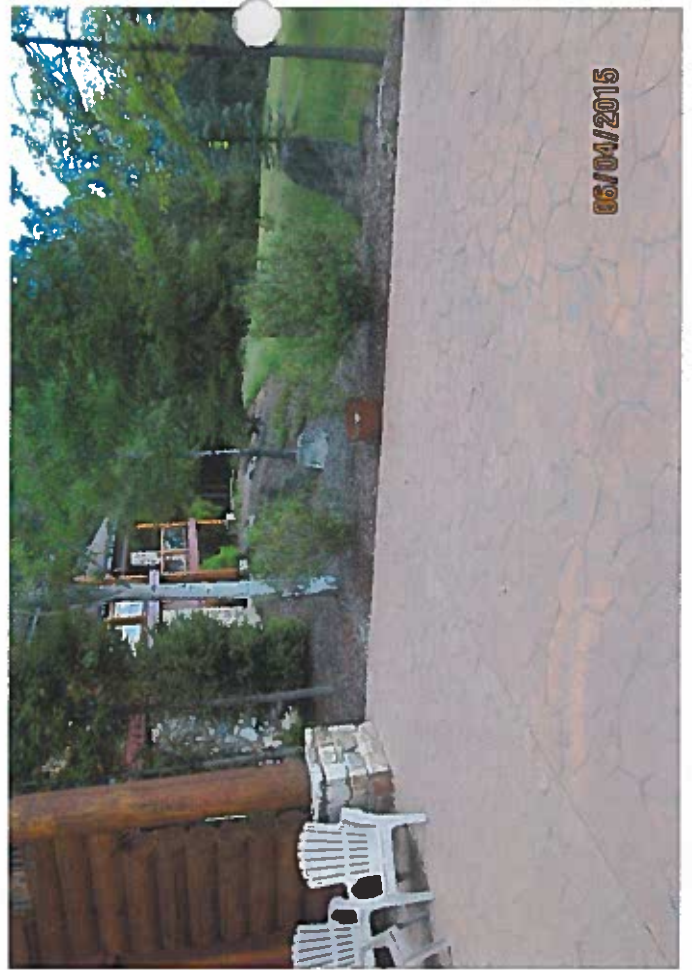
95-16962



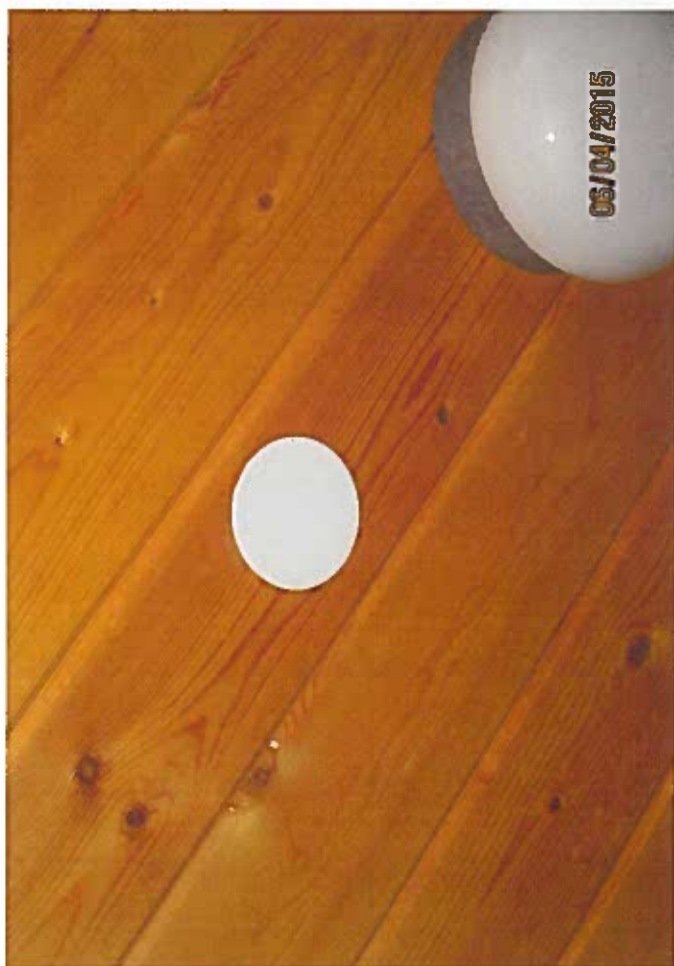
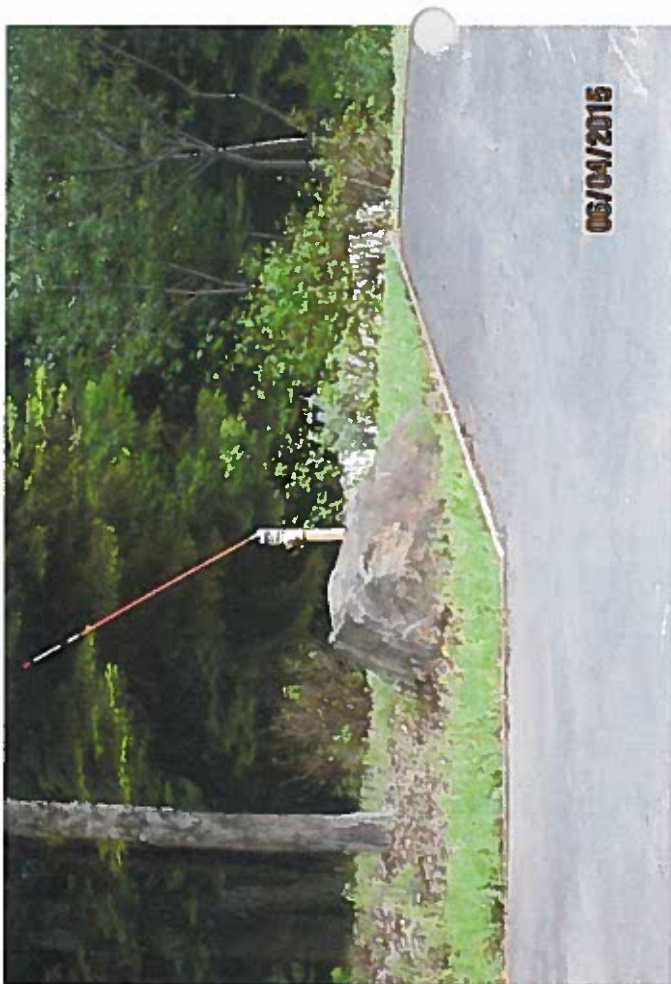
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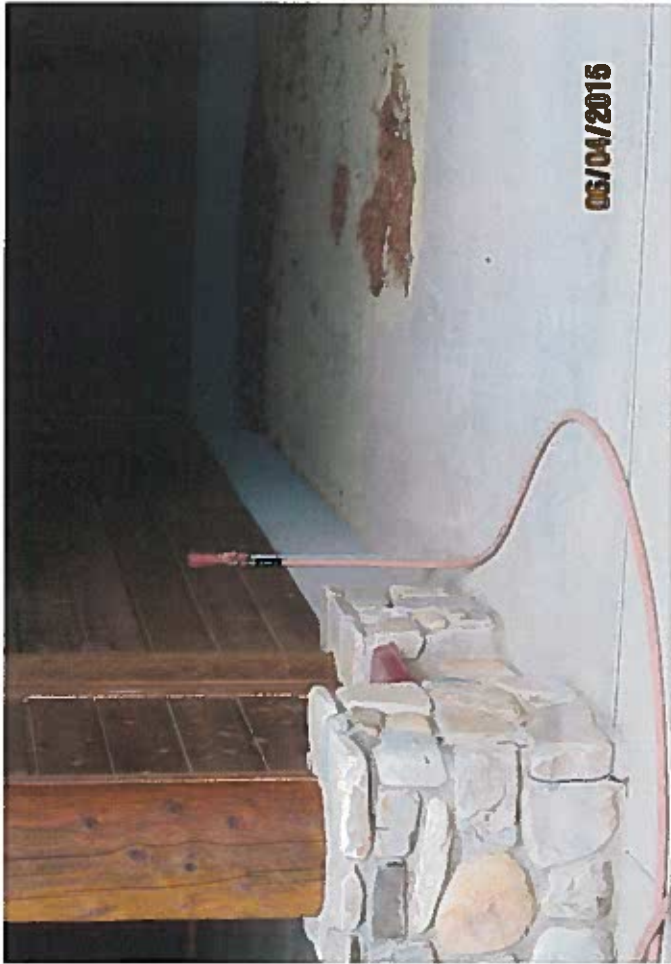
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