

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-12125

Exam Date: 8/20/2015

1. Current Owner:

KENNETH HOWARD 6902 E SLEEPY LANE COEUR D ALENE ID 83814 (208) 667-1658 And/Or

BARBARA HOWARD 6902 E SLEEPY LANE COEUR D ALENE ID 83814 (208) 667-1658

2. Accompanied by: Kenneth Howard

3. SOURCE: 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: 95-12123

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:GROUND WATER NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 9, Twp 50N, Rge 03W, B.M. KOOTENAI County

Method of Determination: GPS and maps. POD location at 116° 42.043, 47° 41.491 (A0015467)

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	03W	9																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	
50N	03W	9																4.1	4.1

Total Acres: 4.1

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.

☒☒

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
D0055604		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:

Additional Computation Sheets Attached

UNABLE TO PERFORM MEASUREMENT BECAUSE NO EXPOSED PIPES BEFORE WATER WENT INTO STORAGE TANK. THEORETICAL PUMPING EQUATION ESTIMATES

$$(5 \text{ HP})(8.8)(0.8) / 685 + (20 \times 2.3087) = 0.05 \text{ CFS}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 4.1 \text{ AC} \times 3 \text{ AF} = 12.1 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05 \text{ CFS} \times 246 \times 1.9835 = 24.4 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 12.1 \text{ AF}$$

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

G. NARRATIVE/REMARKS/COMMENTS

FIELD EXAM SHOWED APPLICANT HAD TWO PERMITS FROM SAME WELL. APPLICANT HAD DRILLED WELL ON SEPERATE PARCEL THAT IS COVERED UNDER LICENSE 95-12123. APPLICANT HAD LOW PRODUCING WELL WITH 3K STORAGE TANK. APPLICANT WOULD IRRIGATE AS MUCH AS HE COULD IN EARLY IRRIGATION SEASON AND SLOWLY START CUTTING BACK TO IRRIGATION ONLY OCCURING NEXT TO HOME. APPLICANT HAD FROST FREE SPICKETS ALL AROUND PROPERTY TO ALLOW FOR IRRIGATION DURING EARLY SEASON TO HAVE FOOD FOR THE DEER. IRRIGATION WILL BE GIVEN AT 4.1 ACRES WITH ANNUAL VOLUME OF 12.3 AF. UNABLE TO PERFORM FLOW MEASURMENT. THEORETICAL ESTIMATES FLOW RATE 21.6 GPM WITH A 5 HP PUMP. DOMESTIC WILL BE GIVEN 0.6 AF.

Have conditions of permit approval been met? X 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	0.04 CFS	0.6 AF
IRRIGATION	01/15 to 11/15	0.05 CFS	12.3 AF
	<u>Totals:</u>	0.050 CFS	12.90 AF

2. Recommended Amendments

Change P.D. as reflected above Add P.D. as reflected above X None

Change P.U. as reflected above Add P.U. as reflected above None

I. AUTHENTICATION

Field Examiner's Name Adam Franklin Date 3-1-16

Reviewer [Signature] Date 3-1-2016

APPLICANT PROVIDED SHEET SHOWING 5 HP PUMP THAT WAS INSTALLED. IDWR IS ASSUMING PUMP IS SET AT 685 FEET AND APPLICANT SAID SYSTEM RAN ON 20 PSI.

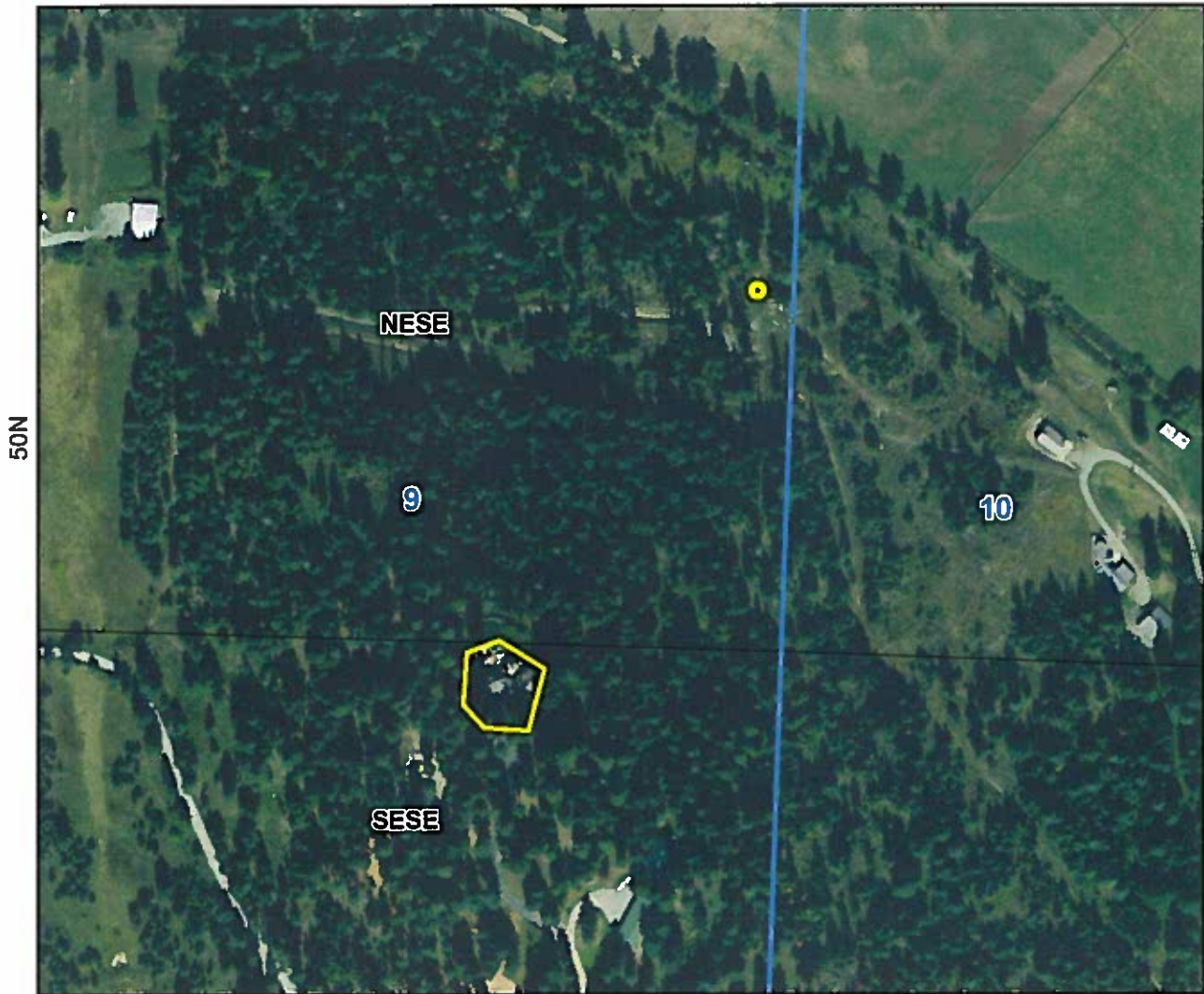
PUMP EQUATIONS WATER RIGHT No. 95-12123 & 95- 12125						
		HP	H in feet	Efficiency as a decimal	Pumpin g lift in feet	System pressur e in PSI
Q =	$\frac{HP \cdot 8.8 \cdot \text{Eff}}{H}$	5	$\frac{731.258}{5}$	0.8	685	20
Q = 0.048 cfs 21.6 gpm						

State of Idaho
Department of Water Resources
Water Right License

95-12125

Domestic

03W



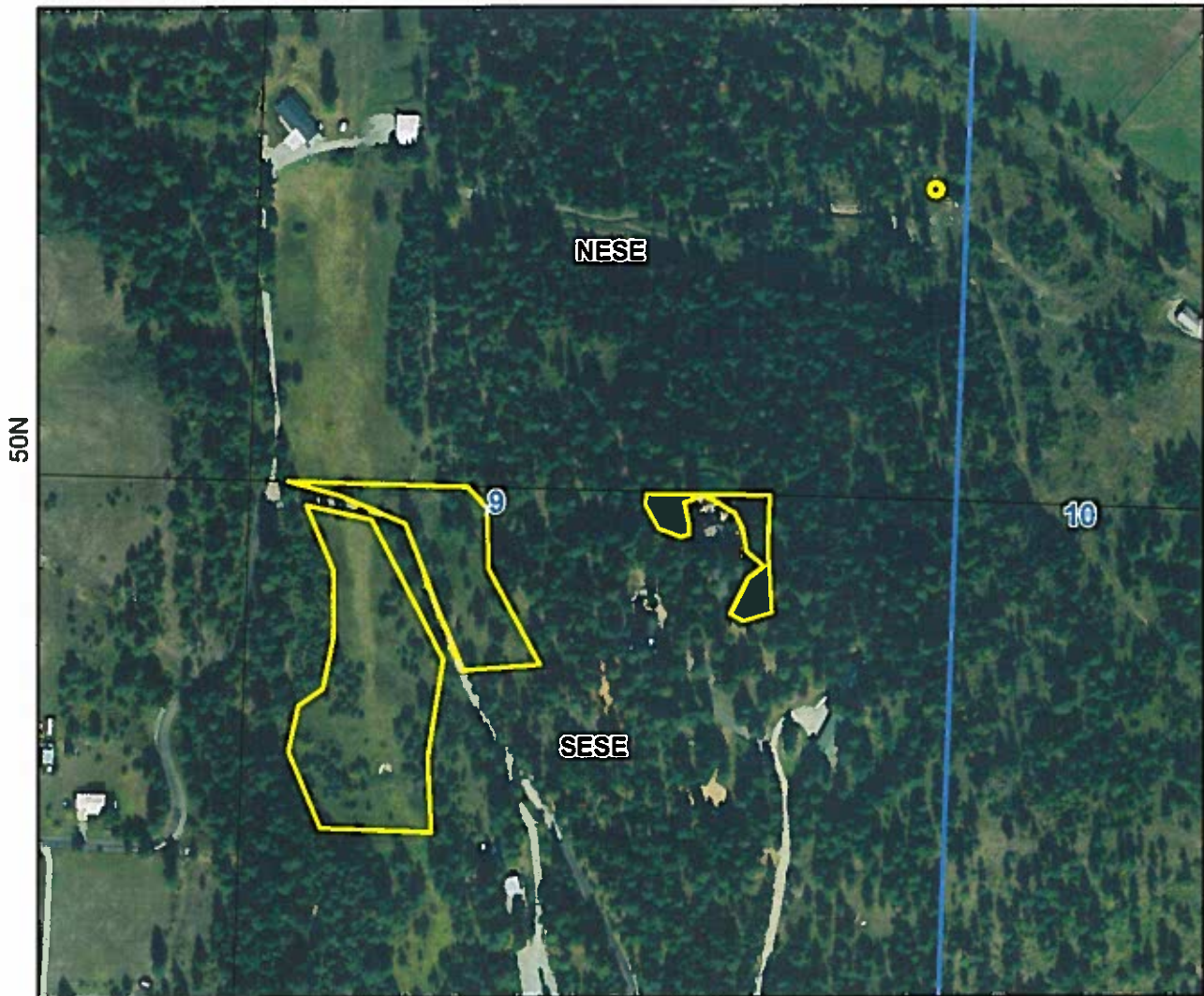
0 0.035 0.07 0.14 Miles

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



State of Idaho
Department of Water Resources
Water Right License
95-12125
Irrigation

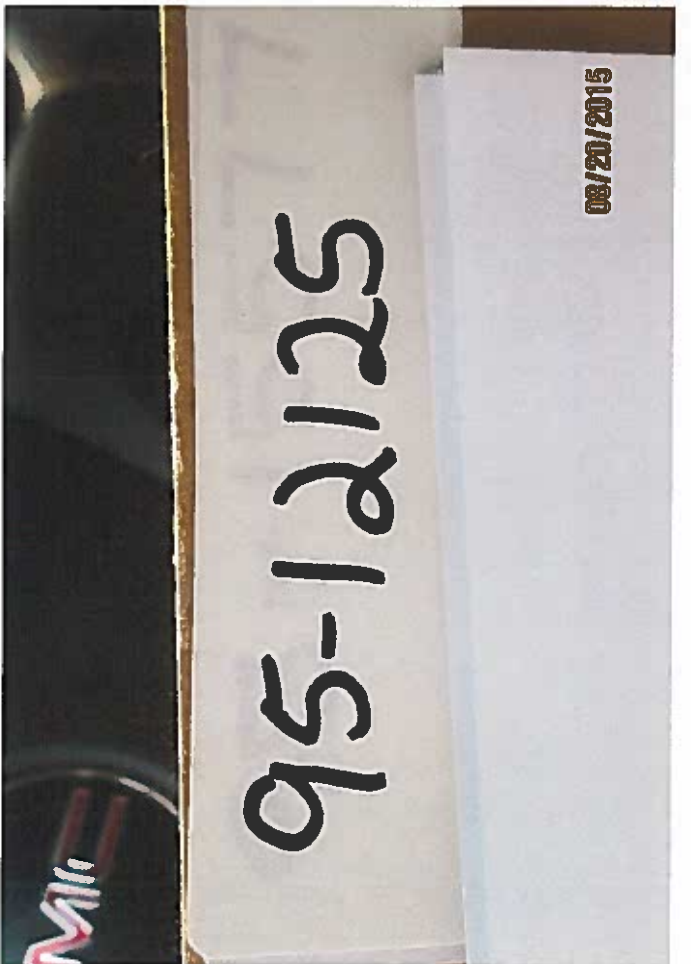
03W



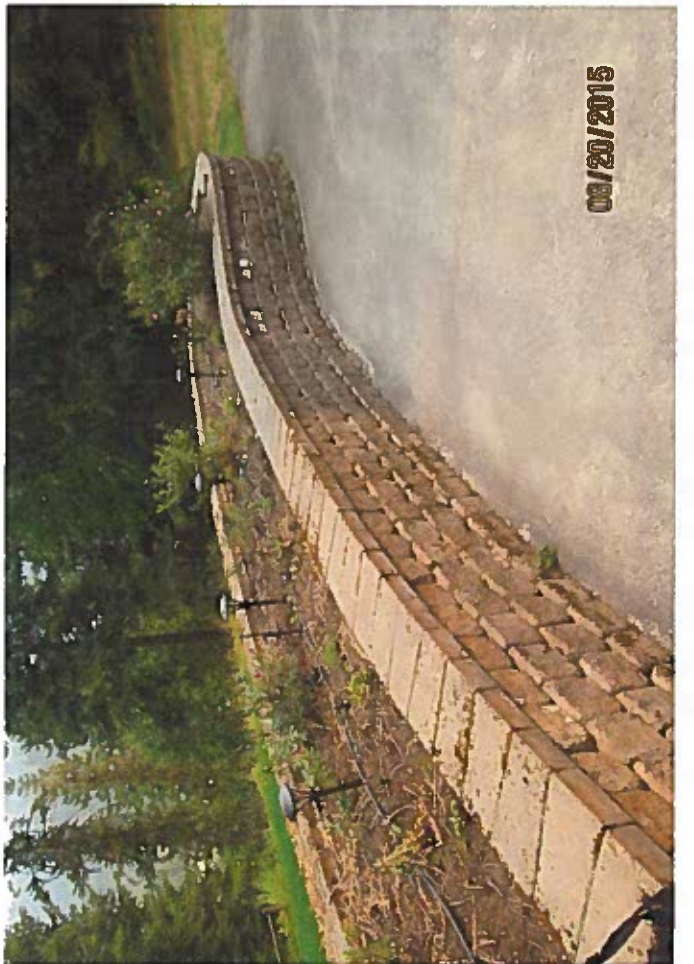
- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections

0 0.0425 0.085 0.17 Miles

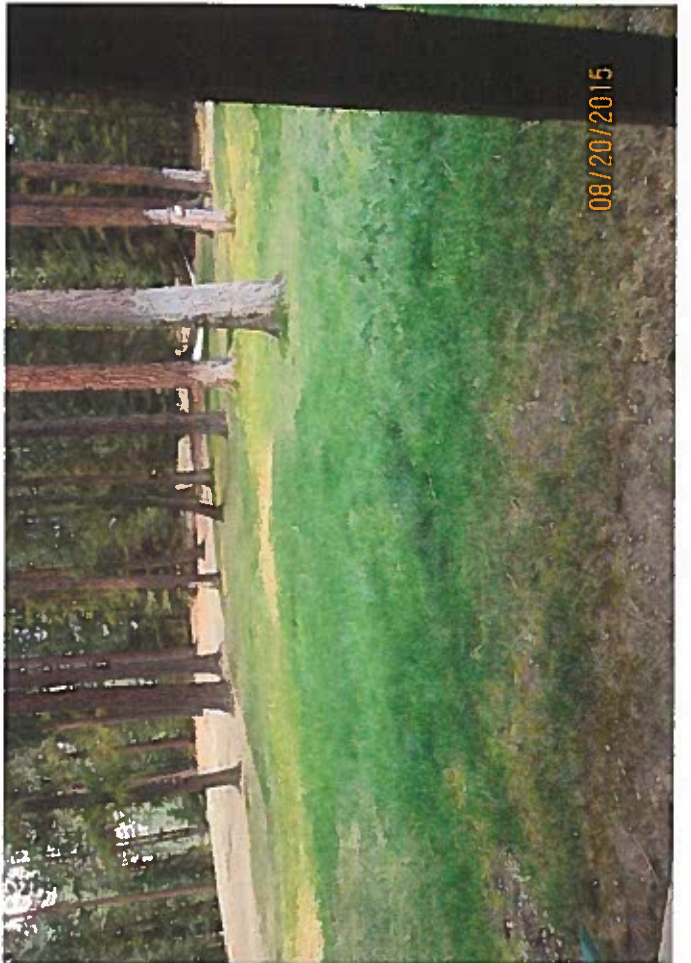




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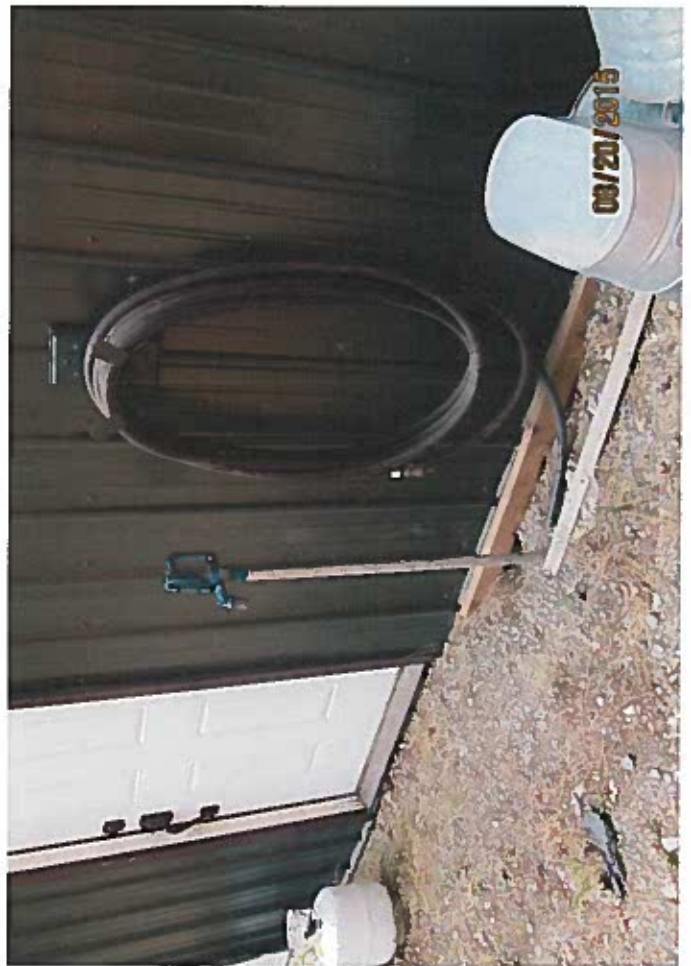
95-12125



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95-12125

July 28, 2008

Mr. Ken Howard

To our Valued Customer: **"Estimate Prepared Prior to Well Drilling and Site Excavation"**
 We are pleased to submit the following estimate/proposal for the installation of your system. Our estimate is based on a well depth of 300' with an estimated well production of 250 GPM. Your system will include the following:

"TOP OF WELL"

- 1 ea. 5 HP, 25 GPM, pump/motor & 3 Phase Starter
- 1 ea. 5-year extended pump and motor warranty
- 273 lf. 1 1/4" galvanized drop pipe
- 2 ea. 1 1/4" check valves
- 290 lf. #10/4 TW submersible pump cable
- 1 ea. Motor splice and tape
- 1 ea. 6" cast iron well seal
- 1 ea. Electrical permit
- 1 ls. Labor to install system to "top of well"

Subtotal "Top of Well"

"RESERVOIR PUMPING SYSTEM"

- 1 ea. 3000 Gallon concrete storage tanks, vents, risers and delivery
- 1 ls. Goulds 25 GPM Pump, 1HP Motor & Variable Speed Control
- 1 ea. 5-year extended pump and motor warranty
- 1 ls. Plumbing in Tank / flow sleeve / 4 gal pressure tank
- 1 ls. Reservoir Fill Controls floats / well on and low out

08/20/2015

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0055604

Drilling Permit No. _____
Water right or Injection well # _____

2. OWNER

Name Ken Howard
Address 6902 East Sleepy Lane
City Coeur d'Alene State ID Zip 83814

3. WELL LOCATION:

Twp. 50 North ☒ or South ☐ Rge. 3 East ☐ or West ☒
Sec. 15 1/4 NW 1/4 NW 1/4

Gov't Lot _____ County Kootenai
Lat. _____ (Deg. and Decimal minutes)
Long. _____ (Deg. and Decimal minutes)
Address of Well Site 6902 East Sleepy Lane
City Coeur d'Alene

Lot _____ Bk. _____ Sub. Name _____

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☐ Other

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

Seal material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method/procedure
Bentonite	0	20	300 lbs	Dry Pour
Granular				

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
6	+3	381	.250	Steel	☒	☐	☐	☒
4	-10	700	.200	PVC	☐	☒	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 381

9. PERFORATIONS/SCREENS:

Perforations ☒ Y ☐ N Method Drilled 3/8" Holes

Manufactured screen ☐ Y ☒ N Type _____

Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
640	700	3/8"	220	4	PVC	.200

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method
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11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____
Describe control device Steel Cap Welded

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 25 Static water level (ft) 80
Water temp. (°F) _____ Bottom hole temp. (°F) _____
Describe access port _____

Well test:

Test method:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
100%	20	1 Hour	☐	☐	☒	☐

Water Quality test or comments: Clear, Cold, No Smell

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water Y	N
8	0	5	Clay and cobbles		X
8	5	25	Sand silty clay	X	
8	25	110	Clay orange		X
8	110	330	Clay with shale gravel seams	X	
8	330	350	Clay blue green soft		X
8	350	370	Shale blue gray fractured		X
8	370	381	Shale blue green firm		X
6	381	440	Shale green blue firm		X
6	440	448	Shale blue green very fractured	X	
6	448	520	Shale blue green medium		X
6	520	568	Shale blue gray fractured	X	
6	568	630	Shale blue gray firm		X
6	630	660	Shale blue gray fractured	X	
6	660	700	Shale blue gray firm		X

UNITED
PUMP & DRILLING
3125 W. Hayden Ave. Hayden, ID 83835
Office: (800) 682-9641 (208) 772-7867

Completed Depth (Measurable) 700
Date: Started 8-29-08 Completed 9-05-08

14. DRILLER'S CERTIFICATION

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

Company Name United Pump & Drilling Co. No. 636
Principal Driller Jason Beckham Date _____
Driller _____ Date _____
Operator II _____ Date _____
Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.