

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17125
Exam Date: 3/6/2017

1. Current Owner:
MICHAEL A MARTIN 2571 S EVERGREEN LN COEUR D ALENE ID 83814 (208) 699-3359
2. Accompanied by: Molly Obetz for exam for 95-15125
Phone No: 208-660-4125
Address: 2551 S Evergreen Ln Coeur d Alene ID 83814
Relationship to Permit Holder: System operator

3. **SOURCE:**
GROUND WATER

TRIBUTARY:

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 95-17124
2. Other water rights with the same point-of-diversion: 95-15125

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

GROUND WATER L3 (NE¼SW¼) Sec. 29, Twp 50N, Rge 03W, B.M. KOOTENAI County

Method of Determination: Maps and GPS. POD location at 116° 43.944, 47° 38.806 D0061150 (A0020094)

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	29									X L 3								

Method of Determination: Google Earth and Arc map.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X Indicate weir size/pipe as applicable.X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.X 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
D0061150	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: UNABLE TO PERFORM FLOW MEASUREMENT

E. FLOW CALCULATIONSMeasured Method: THEORETICAL PUMPING EQUATION
ESTIMATES FLOW RATE AT 8.5 GPM OR 0.02 CFS.X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

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

2. Volume Calculations for Other Uses: DOMESTIC USE FOR 1 HOME WITH IRRIGATION OF UP TO ½ ACRE

1 HOME = 1.2 AF

G. NARRATIVE/REMARKS/COMMENTS

Field exam with Molly Obetz for 95-15125 showed a well serving 8 homes plus Mr. Martin's home. Well D0061150 had a 1.5hp pump running at 65 psi. I was unable to perform flow measurement because system was buried and also mixed with water from Coeur d' Alene Lake. Theoretical pumping equation estimates flow rate at 8.5 gpm or 0.02 cfs. Estimated flow matches what Molly Obetz thought the well produced and what drillers report estimated flow rate was. Application was for domestic for 1 home with up to ½ acre of irrigation. System had a 1,000 gallon cistern to help with any high demand periods.

The applicant applied for 2 permits, 95-17125 for use from a well for domestic and 95-17124 from Coeur d' Alene Lake for domestic use. These are the only two permits for the applicant's home or place of use. The overlap for this right will limit the diversion rate and annual volume for rights 95-17124 and 95-17125 to a diversion rate of 0.04 cfs with annual volume of 1.2 acre feet.

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	0.02 CFS	1.2 AF
<u>Totals:</u>		0.040 CFS	1.20 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. AUTHENTICATIONField Examiner's Name Adam Fink Date 3-6-2017Reviewer Morgan Case Date 3/24/2017

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17125

DOMESTIC



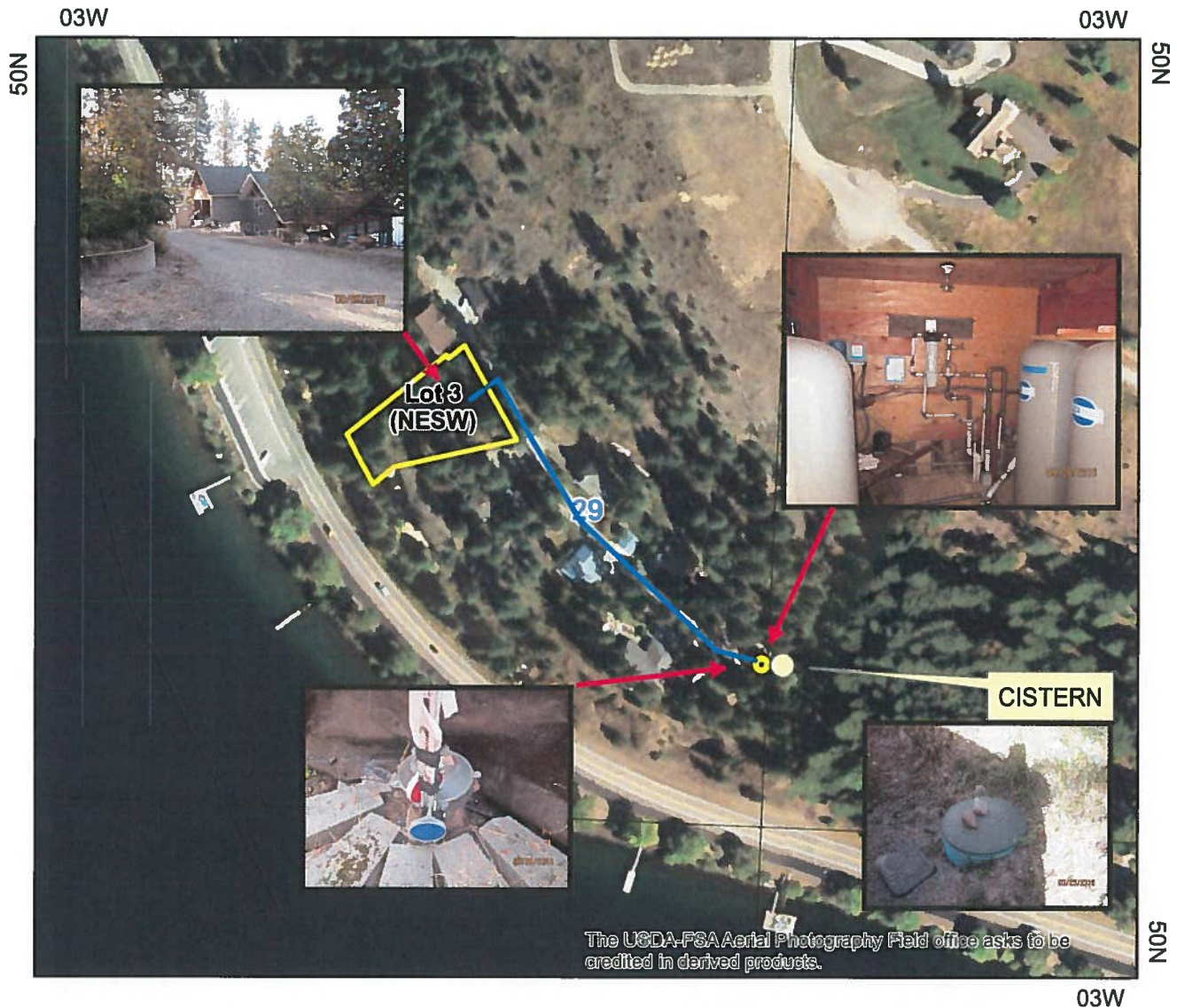
-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

0 0.0275 0.055 0.11 Miles



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SYSTEM DIAGRAM



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

0 0.0275 0.055 0.11 Miles



A 1.5 HP PUMP RUNNING AT 65 PSI WAS INSTALLED IN WELL D0061150. WELL WAS DRILLED TO 420 FEET AND IDWR WILL ASSUME PUMP IS SET AROUND 405 FEET.

PUMP EQUATIONS WATER RIGHT No. 95-17125						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	1.5	555.3401	0.8	405	65
Q = 0.019 cfs 8.5 gpm						

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0061150
Drilling Permit No. 804329
Water right or injection well # _____

2. OWNER:
Name John Kildow
Address 2707 S. Evergreen Ln.
City Coeur d'Alene State ID Zip 83814

3. WELL LOCATION:
Twp. 50 North ☒ or South ☐ Rge. 3 East ☐ or West ☒
Sec. 29 1/4 NE 1/4 SW 1/4

Gov't Lot _____ County Kootenai
Lat. 47 38.808 (Deg. and Decimal minutes)
Long. 116 43.952 (Deg. and Decimal minutes)
Address of Well Site 2707 Evergreen Ln
City Coeur d'Alene

(Give at least name of road + distance to road or landmark)
Lot _____ Blk. _____ Sub. Name _____

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☐ Other _____

5. TYPE OF WORK:
☒ 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 ³)	Placement method/procedure
Bentonite Chips	0	51	1500lbs	Overbored

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
6	+2	51	.250	Steel	☒	☐	☐	☒
4	20	420	40	PVC	☐	☒	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 51

9. PERFORATIONS/SCREENS:
Perforations ☒ Y ☐ N Method _____
Manufactured screen ☐ Y ☒ N Type _____
Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
320	420	1/8x6	100	4	PVC	40

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____
Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:
Depth first water encountered (ft) 120 Static water level (ft) 30
Water temp. (°F) _____ Bottom hole temp. (°F) _____
Describe access port _____

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
420	10	240

Test method:

Pump	Bailer	Air	Flowing artesian
☐	☐	☒	☐
☐	☐	☐	☐

Water quality test or comments: _____

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
10	0	8	Top Soil & Fill		X
10	8	48	Broken Basalt		X
10	48	53	Basalt		X
6	53	120	Basalt		X
6	120	150	Weathered Shale	X	
6	150	355	Fractured Shale		X
6	355	370	Weathered Shale		X
6	370	380	Fractured Shale	X	
6	380	395	Shale		X
6	395	420	Fractured Shale	X	

Completed Depth (Measurable): 420
Date Started: Sep 7, 2012 Date Completed: Sep 11, 2012

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 Horsley Drilling Inc. Co. No. 632
*Principal Driller C-Mark Horsley Date Sep 18, 2012
*Driller Steve C. Horsley Date Sep 18, 2012
*Operator II Zach Horsley Date Sep 18, 2012
Operator I _____ Date _____
* Signature of Principal Driller and rig operator are required.

SON 03W 29

95-17125 Exam Photos



Home in Kildow Subdivision Lots 8-9 Blk. 1. Photos taken during exam for 95-15125.





Well D0061150 given IDWR tag A0020094.



1.5hp pump in well.



System PSI at 65.



Inside pump house where water from Lake Coeur d' Alene and well are mixed together. 95-15125 and 95-15124 covers applicant from both sources.



1,000 gallon cistern on system.