

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17124

Exam Date: 3/9/2017

1. Current Owner:
MICHAEL A MARTIN 2571 S EVERGREEN LN COEUR D ALENE ID 83814 (208) 699-3359

2. Accompanied by: In office exam

3. **SOURCE:**
COEUR D ALENE LAKE

TRIBUTARY:
SPOKANE RIVER

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: 95-11405, 95-11447, 95-11478, 95-15124, 95-13364

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

COEUR D ALENE LAKE L3 (NE¼SW¼) Sec. 29, Twp 50N, Rge 03W, B.M. KOOTENAI County

Method of Determination: Arc map and previous licenses.

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: Arc map and Kootenai County tax lot information. See attached map showing applicant is still the current owner of property.

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 System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
		7.5			

*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: Processing Administrative Memorandum #22
 which states that the permit should be limited to 0.04 cfs.

Additional Computation Sheets Attached

Administrative Memo #22 = 0.04

Permit allowed = 0.04

I am recommending a diversion rate of 0.04 cfs as recommended in Administrative Memo #22.

See attached theoretical pumping equation that shows system can pump at least 0.04 cfs.

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 with up to ½ acre of irrigation = 1.2 AF

G. NARRATIVE/REMARKS/COMMENTS

In office exam, however, information on system was gathered during a previous exam for community system 95-15125. Applicant has two permits, 95-17124 from Coeur d' Alene Lake and 95-17125 from a well. The community system mixes water from both sources because well on produces 8.5 gpm and does not meet the system's needs. 95-17125 was licensed for 0.02 cfs with annual volume of 1.2 acre feet for domestic use and up to ½ acre of irrigation. Information was provided about pump from the lake on a new application for permit for the communities shared water system. Lake source has a 7.5hp pump and diverts water up to pump house where it is mixed with well water and distributed to 9 homes. Theoretical pumping equation estimates a 7.5hp pump running at estimated 65 psi with 80 feet of lift to pump house can produce 0.23 cfs. License will be issued for 0.04 cfs for domestic use with up to ½ acre of irrigation for annual volume of 1.2 acre feet. License will have overlap condition with 95-17125 saying when both are combined cannot exceed 0.04 cfs and annual volume of 1.2 acre feet.

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	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 X None

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

I. AUTHENTICATION

Field Examiner's Name Adam Fushil Date 3-10-2017
 Reviewer Morgan Case Date 3/24/2017

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17124

DOMESTIC



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

0 0.035 0.07 0.14 Miles



Kootenai County
Terms of Use

Map Layers

Search By

E COEUR D'ALENE LAKE DR

S EVERGREEN LN

Owner Additional

AIN: 123277 LRSN: 50730
Parcel Number: 0-4320-001-009-A
Appr Dist: 6 TRS: 503W29G3
Incorporation: NONE

Owner Information:
MARTIN, MICHAEL A
2571 S EVERGREEN LN
COEUR D'ALENE, ID 83814

Site Address:
2571 S EVERGREEN LN
COEUR D'ALENE

Legal Description: BKPG: D83
KILDOW SUB, TAX#24156 IN LTS 8 &
9 BLK 1 & UNDIV INT IN PVT RD

Acres: 0.488

0.02 Miles

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17124

SYSTEM DIAGRAM



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

0 0.035 0.07 0.14 Miles



THEORETICAL PUMPING EQUATION FOR WATER RIGHT 95-17124

MEASUREMENT OF DIVERSION RATE IS COVERED UNDER IDAPA RULES 37.03.02.035.01.r. THIS THEORETICAL PUMPING EQUATION IS ONLY BEING USED TO SHOW THE PUMP IS CAPABLE OF PRODUCING 0.04 CFS. IDWR KNOWS THE PUMP SIZE IS 7.5HP AND THAT THERE IS ABOUT 80 FEET OF LIFT TO THE PUMP HOUSE. IDWR WILL ASSUME THE PSI IS AROUND 65.

PUMP EQUATIONS WATER RIGHT No. 95- 17124						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	7.5	230.3401	0.8	80	65
Q = 0.230 cfs 103.0 gpm						

95-17124 Exam Photos



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



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.