

[illegible]

Method of Determination: GIS

Change in POD? ☒ X ☐ N Amendment Required? ☒ X ☐ N2. **PLACE OF USE:** 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	
49N	4W	13			D														
		Lot #			2														
Total Acres =																			

Method of Determination: Aerial photos

Change in POU? ☒ X ☐ N Amendment Required? ☒ X ☐ N☐ Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

☒ X Aerial Photo Attached (required for irrigation of 10+ acres).☐ Photo of Diversion and System Attached

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Pump in lake		1.0 per permit application			

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

D. FLOW MEASUREMENTS

1. easurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
N/A						

2. Measurements: In house field exam, no measurement taken, see theoretical sheet**E. FLOW CALCULATIONS**☒ X Additional Computation Sheets Attached

Measured Method:

Permit allowed = 0.04 cfs

Theoretical calculation = 0.04 cfs

License recommend for 0.04 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

V_{I.R.} = (Acres Irrigated) x (Irrigation Requirement) = NAV_{D.R.} = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835 = NA

2. Volume Calculations for Other Uses: NA

G. PURPOSE OF USE

Other: < >

Method of Determination: Aerial photo shows one home

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA _____

- This permit qualifies for an in-house exam.

-All conditions should be carried over to the license except for condition #2 (26A).

Have conditions of permit approval been met? X Yes No

1. Recommended Amounts

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

Other: < >

J. AUTHENTICATION Steven Visosky, Water Resource Agent

Field Examiner's Name [Signature] Date 10-14-2015

Reviewer A. C. C. L. M. M. Date 8-19-13

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 95-12627
 Reviewer: Steven Visosky
 Date of Review: 10/13/2015

P/D No.:

PUMP HORSEPOWER
 BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

RATE OF FLOW (cfs)

Well #1
1
0
20
40
0.05
25

Well #2
1
0
20
50
0.05
20

Well #3
1
0
20
60
0.04
17

0.14
62.43

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.
 No Friction

Examiners Notes:

The permit holder mentioned that a 1 HP pump was being used in the basement of the house. The above calculation show that with a twenty foot lift from the lake, a 1HP pump could deliver .04 cfs at 60 psi. Taking into consideration the need to overcome pressure losses of piping from the lake, a 1 HP pump at this site could deliver 0.04 cfs or 17 gallons per minute at 60 PSI.

Identification No. _____

Application No. 95-7614

PERMIT ISSUED FOR 0.04 SEC. FT

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR PERMIT

APPROVED

To Appropriate the Public Waters of the State of Idaho

(TYPE OR PRINT IN INK)

1. Name of applicant MERLE TILTON Phone: 509-747-1411
post office address 1111 W 11th Spokane WA 99204

2. Source of water supply Coeur d'Alene Lake which is a tributary of _____

* 3. a. Location of point of diversion is Gov't Lot 2 1/4 of Section 13 Township 49N
Range 4W B.M. Kootena County; additional points of diversion if any: _____

Lot 1 - Driftwood Point - 1st Driftwood Addition - Coeur d'Alene Bay.

Address is similar but not the same as WR 95-12627

b. If water is not consumed, it will be discharged into _____ at a point in _____ 1/4 of _____ 1/4 of Section _____ Township _____ Range _____ B.M. _____

4. Water will be used for the following purposes:

* Amount 04 for Domestic purpose from Jan 1 to Dec 31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purpose from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purpose from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated:

* a. 04 cubic feet per second and/or
b. _____, acre feet per annum.

6. Proposed diverting works:

a. Description of ditches, flumes, pumps, headgates, etc. pump and pipe (1/2 hp)

b. Height of storage dam _____ feet, active reservoir capacity _____ acre feet; total reservoir capacity _____ acre feet, materials used in storage dam: _____

Period of year during which storage will occur _____ to _____ inclusive.
(Mo. Day) (Mo. Day)

c. Proposed well diameter is _____ inches; proposed depth of well is _____ feet.

7. a. Time required for the completion of the works and application of the water to the proposed beneficial use is 1 years.

b. Estimated construction cost is \$ _____.

8. Description of proposed uses:

* a. If water is not for irrigation:

(1) Give the place of use of water: Gov't Lot 2 1/4 of Section 13 Township 49N
Range 4W B.M.

(2) Amount of power to be generated: _____ hp under _____ feet of head.

(3) List number of each kind of livestock to be watered _____

(4) Name of municipality to be served _____, or number of families to be supplied with domestic water _____.

(5) If water is to be used for other purposes describe: Domestic water for lake cabin - 2500 Gallon Per Year

* Information obtained in telephone conversation with Mrs. Merle Tilton
4-30-76 RGH

Attachment to In-House Field Exam

95-12627

04W



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters
-  Taxlots

0 0.004 0.008 0.016 Miles

