

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-11812
Exam Date: 8/4/2016

1. Current Owner:
ARROW POINT COMMUNITY ASSN C/O MC CATHREN MANAGEMENT
3029 E BOONE AVE SPOKANE WA 99202-3605 509-232-5160

2. Accompanied by: Keith Botai
Phone No: 707-775-7891
Relationship to Permit Holder: Property Manager

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

TRIBUTARY:
SPOKANE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 95-8652
2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

COEUR D ALENE LAKE SE¼SE¼ Sec. 36, Twp 50N, Rge 04W, B.M. KOOTENAI County

Method of Determination: Maps and GPS. POD location at 47° 37.772, 116° 46.056

2.

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	
49N	03W	6	1.3 L 1																1.3
50N	04W	36																4.2 L 4	4.2

Total Acres: 5.5

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
	FRANKLIN	3			

*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 CALCULATIONSX Additional Computation Sheets Attached

Measured Method: UNABLE TO PERFORM FLOW MEASUREMENT. THEORETICAL PUMPING EQUATION ESTIMATES FLOW RATE AT 29.8 GPM OR 0.07 CFS. PUMP WAS RUNNING AT 60 PSI AND WAS PUMPED UP HILL TO CISTERN.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 5.5 \text{ AC} \times 3.0 \text{ AF} = 16.5 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.07 \times 246 \times 1.9835 = 34.2 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 16.5 \text{ AF}$$

2. Volume Calculations for Other Uses: NO ANNUAL VOLUME ON LICENSE BECAUSE SOURCE IS SURFACE WATER.

G. NARRATIVE/REMARKS/COMMENTS

Field exam with Keith Botai showed a 3hp pump from lake running at 60psi. A flow measurement could not be performed because irrigation only occurred at night and irrigated areas were public and occupied at time of exam. Water was pumped from the lake up a steep hill to a 6,500 gallon buried tank. From there it was pumped to irrigation system. Irrigation was all done by automatic sprinklers. Theoretical pumping equation estimates flow rate of system at 0.07 cfs or 29.8 gpm.

The system can be switched from groundwater to surface water. The groundwater irrigation is covered under adjudication recommendation 95-8652. Condition X35 will be put on license since 95-8652 is a license and will be recommended how it was licensed. X35 will limit the irrigation to a diversion rate of 0.10cfs and limit the acreage to 5.5 acres.

Amendment will be sent out to move some irrigation from Gov Lot 1 to Gov lot 4. Permit was for 2.0 acre of irrigation on Gov Lot 1 but on 1.3 were found. The remainder acreage was moved to Gov Lot 4 to cover the rest of the irrigation. License will be issued for 0.07 cfs with no annual volume.

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>
IRRIGATION	03/15 to 11/15	0.07 CFS
<u>Totals:</u>		0.070 CFS

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

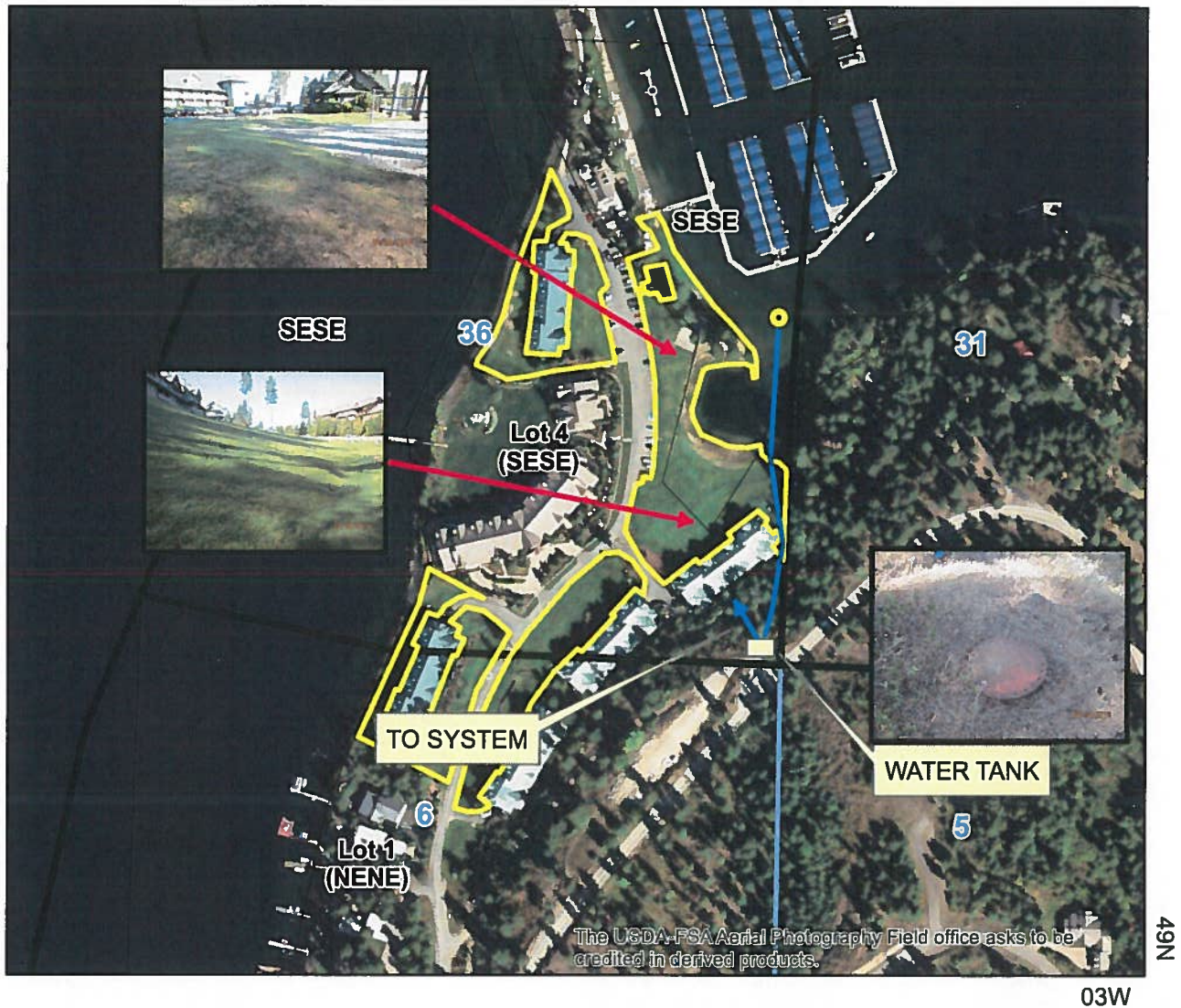
I. AUTHENTICATION

Field Examiner's Name Adam Fink Date 5-15-2017

Reviewer Morgan Case Date 6-7-2017

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-11812

SYSTEM DIAGRAM



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

0 0.0425 0.085 0.17 Miles



State of Idaho
Department of Water Resources
Attachment to Field Exam
95-11812

IRRIGATION



The UGDA-FSA Aerial Photography Field office asks to be credited in derived products.

49N

03W

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

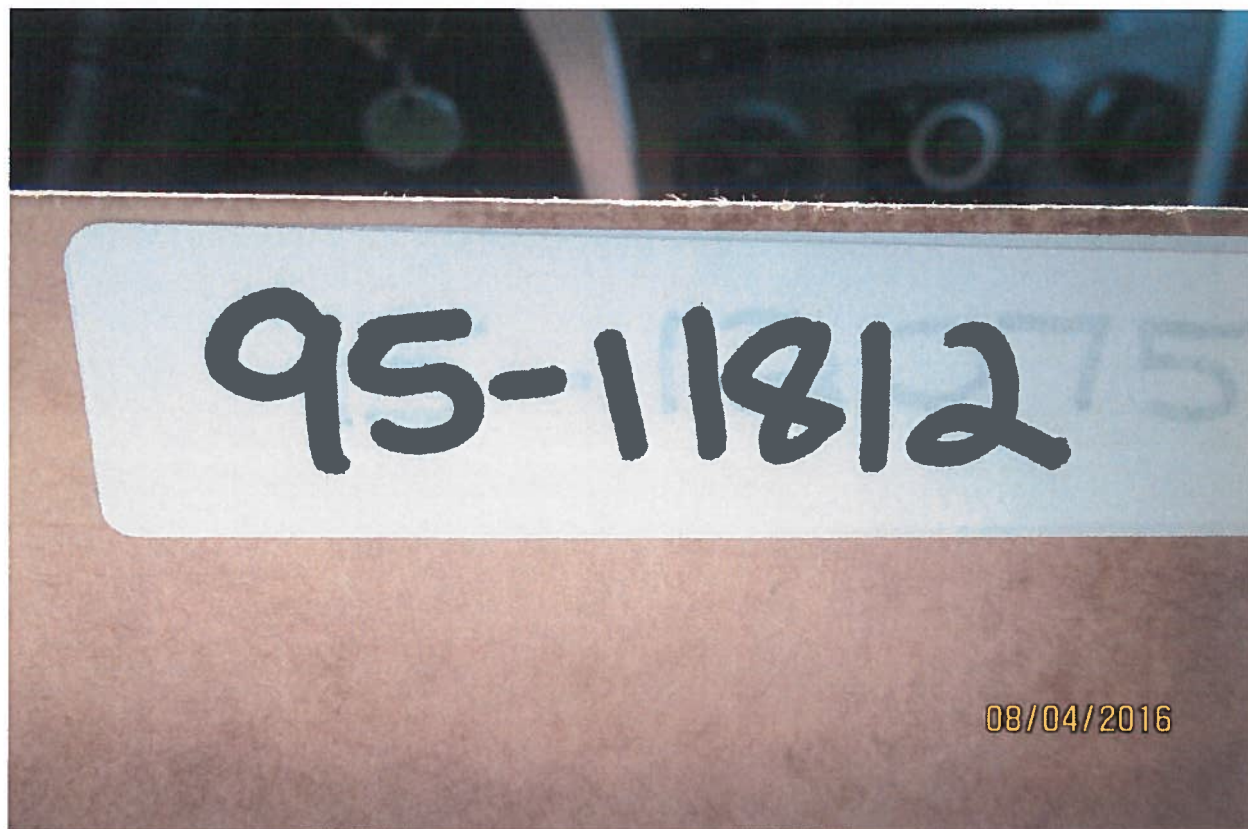
0 0.0425 0.085 0.17 Miles



THEORETICAL PUMPING EQUATION FOR WATER RIGHT 95-11812

COULD NOT PERFORM FLOW MEASUREMENT BECAUSE IRRIGATION ONLY OCCURRED AT NIGHT. SYSTEM HAD A 3HP PUMP FROM THE LAKE RUNNING AT 60 PSI. PUMPING LIFT WILL BE PUT AT 180 FEET BECAUSE WATER WAS PUMPED UP HILL TO CISTERN.

PUMP EQUATIONS WATER RIGHT No. 95- 11812						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	3	318.7755	0.8	180	60
Q = 0.066 cfs 29.8 gpm						



View of irrigation. Point of diversion was buried and not visible but generally came ashore to the left of this picture.



Irrigation.



Irrigation.



Irrigation.



Irrigation and area where pipe from lake goes up hill to storage tank.

METAL PARTS HAVE BEEN PROPERLY GROUNDED
ACCORDING TO APPLICABLE CODES.

155661101 REV. 6



Franklin Electric
Shuttlesburg, Indiana 46714

MOTOR & CONTROL BY

Franklin Electric

c(UL) LISTED 34CL REUC7

MODEL 2823028310

INDOOR/OUTDOOR USE (ENCL. 3)

HP 3

VOLT 230

S.F. MAX AMP 17.0

BOTH OVERLOADS MUST BE RESET FOR MOTOR TO START



3hp Franklin pump from lake to storage tank.



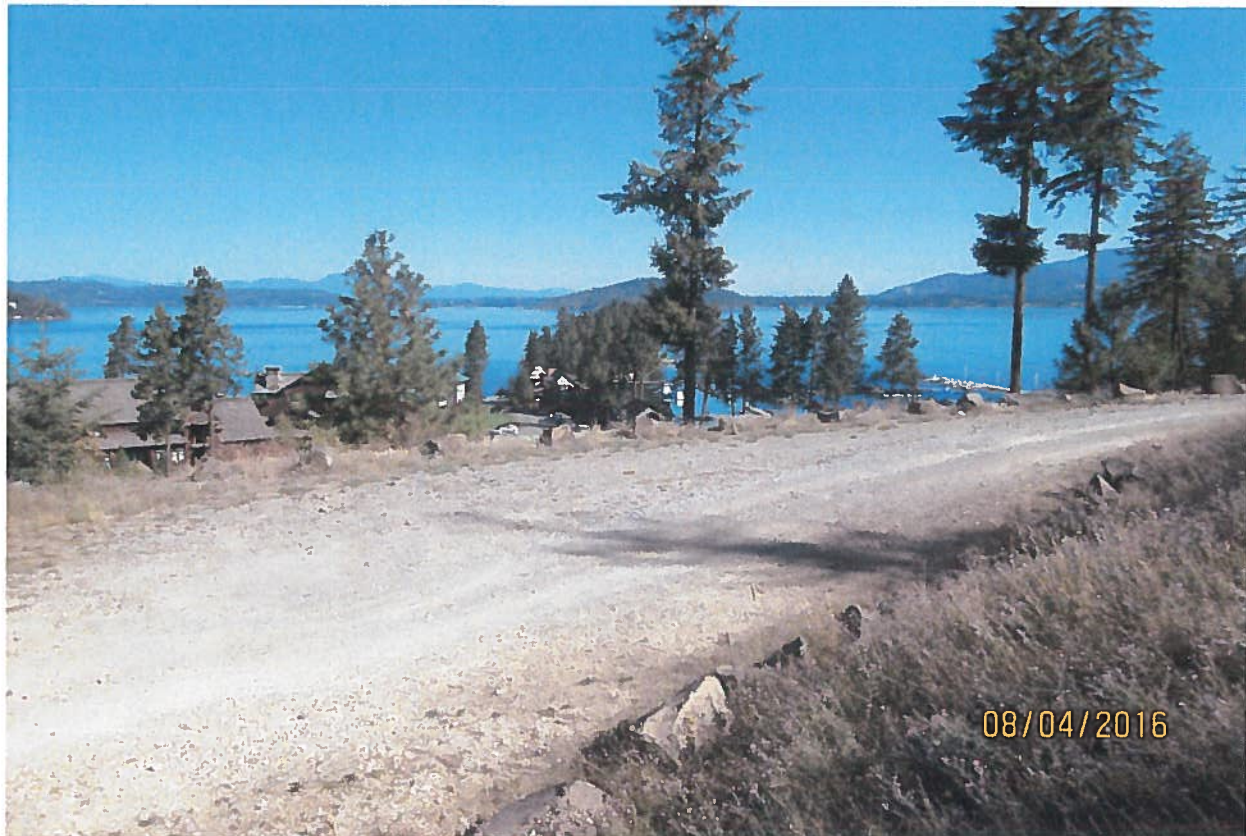
Top of storage tank.



Electrical box on edge of storage tank for irrigation from the tank.



Meter on system was from the tank so could not be used to get a diversion rate.



View from storage tank area with lake in background and community below hill.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Northern Region • 7600 N. Mineral Drive, Suite 100 • Coeur d'Alene, Idaho 83815-7763
Phone: (208) 762-2800 • Fax: (208) 762-2819 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

May 1, 2017

ARROW POINT COMMUNITY ASSN
C/O MC CATHREN MANAGEMENT
3029 E BOONE AVE
SPOKANE WA 99202-3605

RE: Permit No. 95-11812

Dear Permit Holders:

I previously forwarded to you an Application for Amendment so that you could amend Permit No. 95-11812 to correspond with the findings of the Department's field examiner. I have not yet received your response.

If I do not receive the amendment and the \$100.00 fee within fourteen (14) days, your Water Right License will be issued for less than could have been allowed. In case the amendment form I sent you has been misplaced, a new one is enclosed.

If you have any questions, please contact me as soon as possible at (208) 762-2800.

Sincerely,

A handwritten signature in blue ink that reads "Adam Frederick".

Adam Frederick
Senior Water Resource Agent

Enclosures(s): Application for Amendment



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C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

March 30, 2017

RECEIVED

MAY 12 2017

IDWR/NORTHERN

ARROW POINT COMMUNITY ASSN
C/O MC CATHREN MANAGEMENT
3029 E BOONE AVE
SPOKANE WA 99202-3605

RE: Water Right Permit No. 95-11812

Dear Permit Holder(s):

The Department of Water Resources is reviewing the permit(s) referenced above prior to issuing water right license(s). By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit.

The examiner who verified your water use reported that certain elements of the permit(s) have been developed differently than described on your permit(s). Changes that do not increase the authorized use of water under the permit(s) can be requested and approved in accordance with Section 42-211, Idaho Code. Before license(s) can be issued, your permit(s) must be amended to depict your water use as it was actually developed.

Based on the examiner's report, the following elements were developed differently than described on your permit(s):

_____ Point(s) of Diversion

 X Place(s) of Use

_____ Other

The enclosed Application for Amendment form(s) depicts the elements of the water right(s) as they will appear on the license(s) when issued. Please review the amendment form(s) carefully. If you concur with the information presented, please sign and return the form(s) with the \$100.00 filing fee within 14 days.

If you have any questions, please call me at 208-762-2800.

Sincerely,

Adam Frederick
Senior Water Resource Agent

Enclosure(s): Application for Amendment