

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-09579

Exam Date: 8/1/2017

1. Current Owner:
ARROWHEAD RANCH WATER COMPANY LLC PO BOX 7 COCOLALLA ID 83813 (208) 265-5555
2. Accompanied by: Michael Bennett
Relationship to Permit Holder: Owner/operator
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: None

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

GROUND WATER L1 (NW¼NW¼) Sec. 18, Twp 55N, Rge 02W, B.M. BONNER County

Method of Determination: Maps and GPS. POD located at -116° 37.787, 48° 07.238 (96-94-N-170) given IDWR tag A0020087

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	
55N	02W	18					X L 6	X L 1											

Method of Determination: Google Earth and Arcmap.

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
96-94-N-170	FRANKLIN	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: N/A

E. FLOW CALCULATIONS

Measured Method: See attached pump curve for Franklin 5hp pump.

X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: Domestic use for 9 homes with irrigation up to ½ per lot

9 homes x 1.2 AF (0.6 in home use and 0.6 up to ½ acre of irrigation) = 10.8

G. NARRATIVE/REMARKS/COMMENTS

Field exam with the operator/owner of system, Michael Bennett, showed a well serving 7 homes and 2 stubbed in lots. Well was drilled in 1994 and was equipped with a 5hp Franklin pump. I was unable to perform a flow measurement because of the buried water line to 2,000 gallon storage tank and pressure tanks. Pump curve shows well can produce 24 gpm or 0.05 cfs. From the pump house, water was distributed to 7 built homes and 2 stub in lots. 1 of those lots had a home on it, but had since been demolished in order to build a new home. License will be issued for domestic use for 9 homes with irrigation up to ½ acre per lot. License will be issued with a diversion rate of 0.05 cfs with an annual volume of 10.8 acre-feet.

During the exam, Mr. Bennett identified a few different lots then what was applied for. He said when he applied he got a little confused looking at the aerial photo and picking out the lots. He had identified the correct QQ for the place of use. Condition X60 will be removed at licensing because the southernmost property is not in a subdivision and the condition will only fit 8 of the lots. Condition X59 will be added to identify where the point of diversion is located. Condition X04 will remain to identify the 9 homes served. Condition 004 will be left because there is no common ownership of all of the lots.

During license review, a couple of water rights were described in the general location of this right. All water rights were older and only identified the 40 acre tract. 96-8970 was shown to be north of this place of use on another property. 96-4058 was shown to be on Mr. Bennett's property which is not served water under this right. 96-8187 appeared to be west of the main road which would not have any overlap with this right. There are no other overlap concerns.

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	0.05 CFS	10.8 AF
	<u>Totals:</u>	0.050 CFS	10.80 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

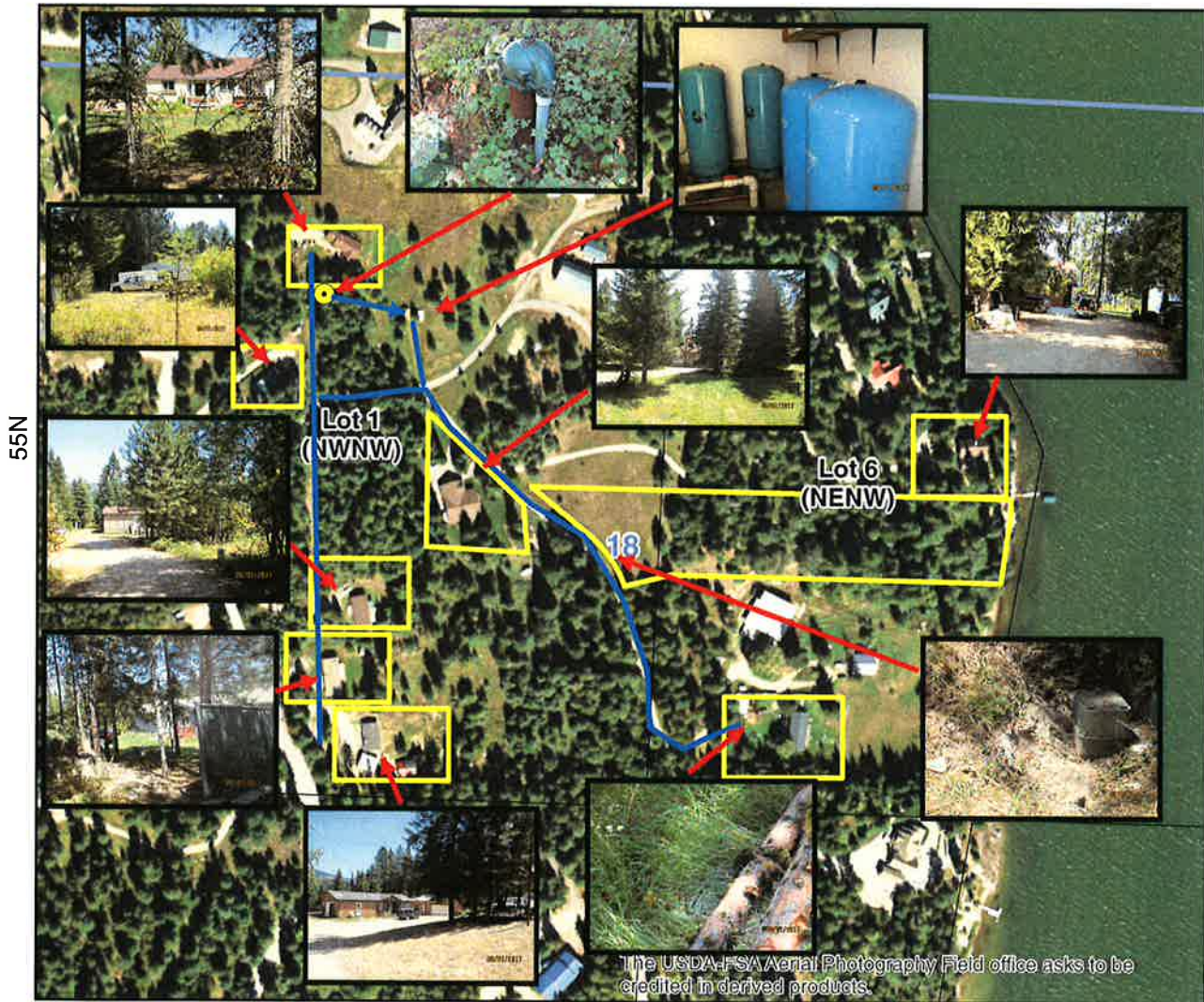
Field Examiner's Name Adrian Funder Date 3/2/2018

Reviewer Douglas Jones P.E. Date 6/19/18

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9579

DOMESTIC / SYSTEM DIAGRAM

02W



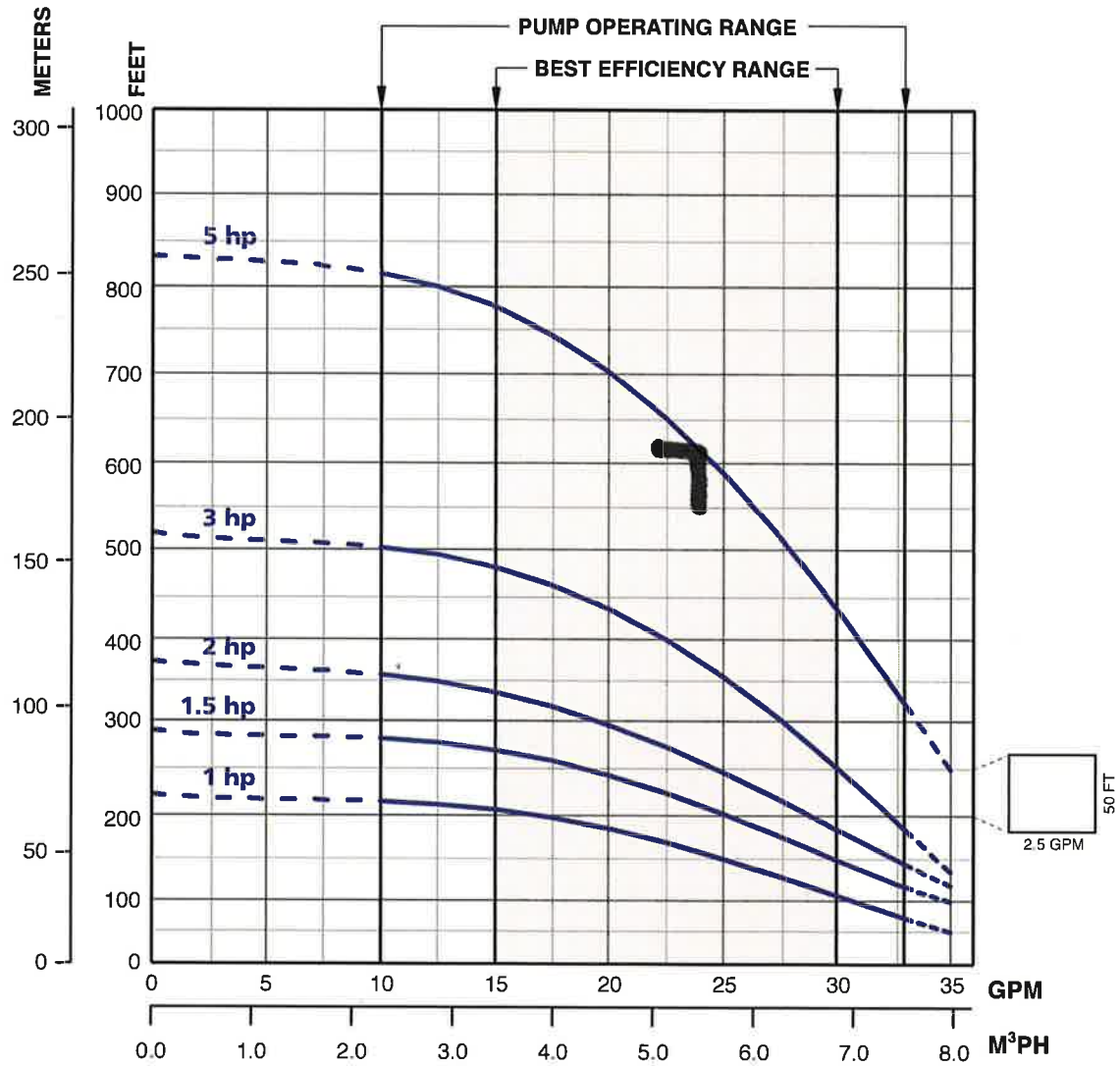
- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections

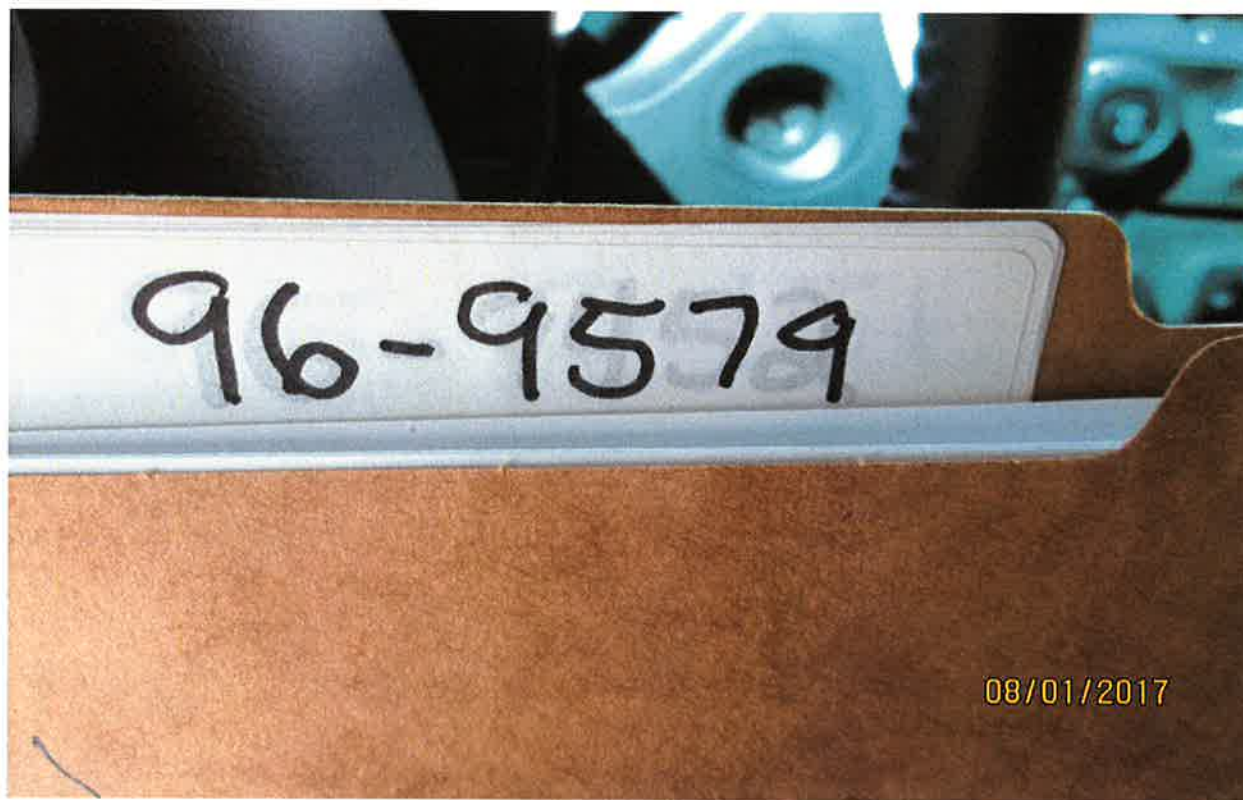
0 0.04 0.08 0.16 Miles



Submersible Pumps

4" Series V Pumps - 25 GPM





POD, well 96-94-N-170, given IDWR tag A0020087



Pump house. Measurement was impossible due to storage tank and pressure tanks.



Home 1.



Home 2.



Home 3.



Home 4.



Home 5.



Home 6.



Home 7.



Stub-in for home 8.



Stub-in for home 9.