

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 91-07452

Exam Date: 6/15/2017

1. Current Owner:
JERRY EMERSON 355 AHRS RD SAINT MARIES ID 83861 (208) 568-1874

2. Accompanied by: Jerry Emerson

3. **SOURCE:**
AHRS CREEK

TRIBUTARY:
ST JOE RIVER

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:**

AHRS CREEK NW¼SE¼ Sec. 18, Twp 46N, Rge 01E, B.M. BENEWAH County

Method of Determination: Maps and GPS. POD located at -116° 22.841, 47° 19.893

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	
46N	01E	18														2.0			2.0

Total Acres: 2

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
	UNKNOWN				

*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
5 GALLON BUCKET						

2. Measurements: 5 GALLON BUCKET TEST PERFORMED IN 50 SECONDS

5 GAL / 50 SECONDS X 60 SECONDS = 6 GPM OR 0.01 CFS

E. FLOW**CALCULATIONS**

Measured Method: N/A

____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2 \text{ AC} \times 3 \text{ AF} = 6.0 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.01 \text{ CFS} \times 231 \text{ DAYS} \times 1.9835 = 4.6 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 4.6 \text{ AF}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

Field exam with applicant, Jerry Emerson, showed a small unknown pump used for irrigation. A 5 gallon bucket test was performed and filled in 50 seconds. Bucket test showed a diversion rate of 6 gpm or 0.01 cfs. Mr. Emerson would use the pump to fill a 275 gallon tank that was towed behind a bulldozer. From there, he would drive to where he had recently harvested wood to water the trees he had replanted. Mr. Emerson had a simple hose going from the tank that was gravity fed for watering new trees.

Because we do not put annual volumes on surface water rights, there will be none put on this license. Condition R66 will be put on license even though applicant cannot divert 0.03 cfs per acre. The condition will go on license in case the applicant files another application to ask for a greater diversion rate. The diversion rate will be the limiting factor for the applicant's usage. It was noticed during license review that the season of use was incorrect on permit and the proper corrections were made at licensing. Condition 227 was changed to make it better by identifying a gauging station to check stream flows on the St. Joe River. All other conditions will be kept on license including 004 because place of use covers two separate properties.

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>
IRRIGATION	03/15 to 10/31	0.01 CFS	
<u>Totals:</u>		0.010 CFS	

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

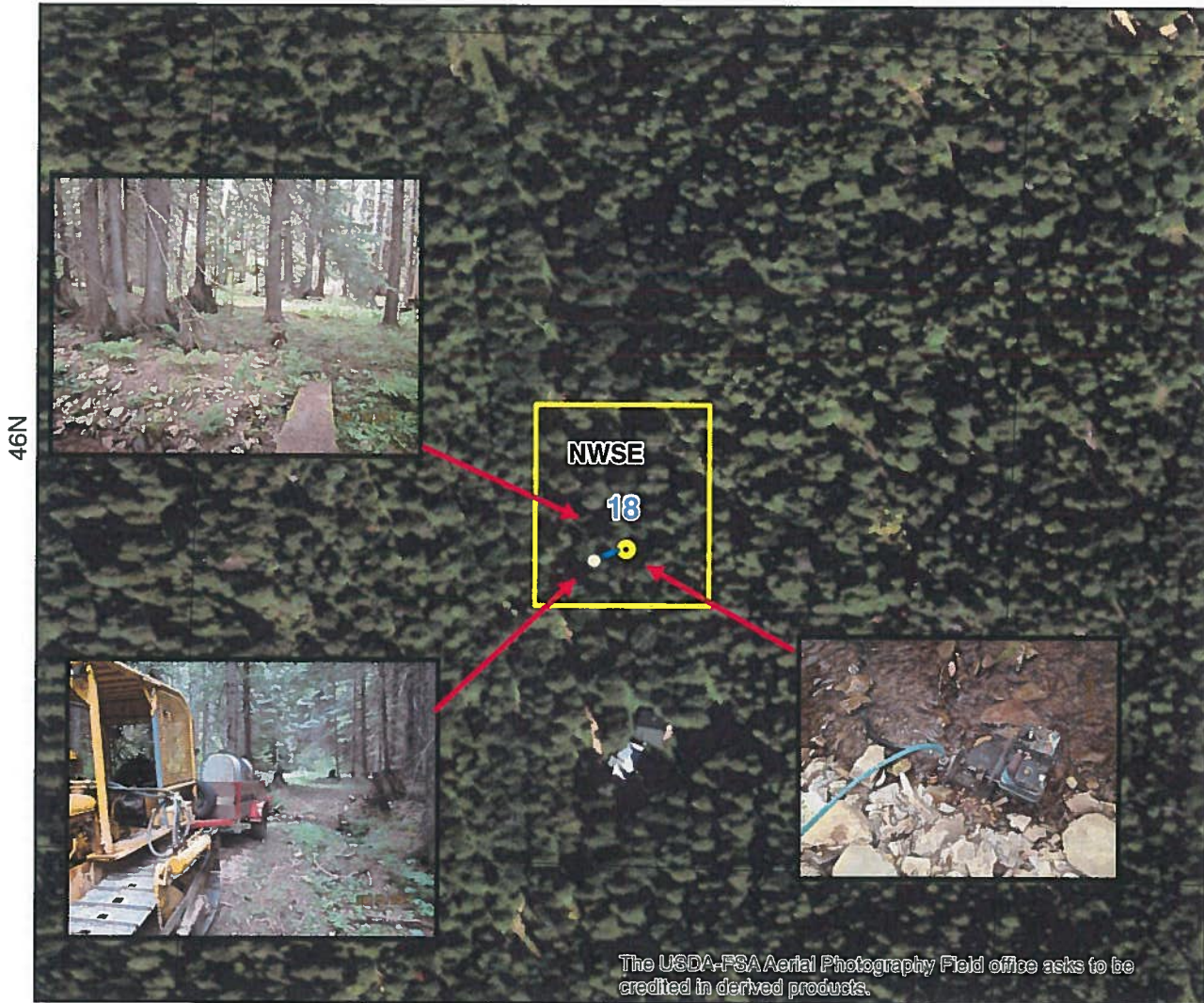
Field Examiner's Name Adam Funchill Date 12/21/2017

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Attachment to Field Exam
91-7452

IRRIGATION / SYSTEM DIAGRAM

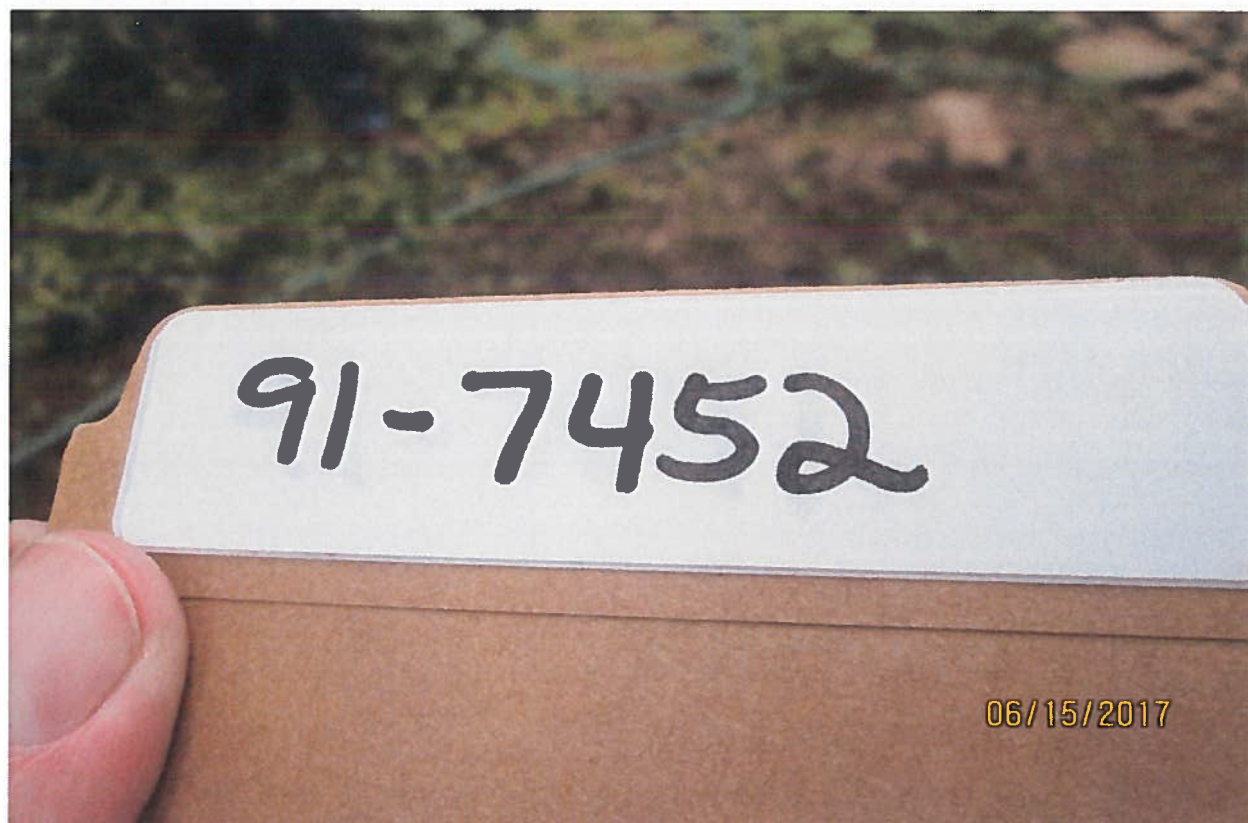
01E



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

0 0.035 0.07 0.14 Miles





POD, unknown pump maker and pump size.



Applicant pumped from creek to 275 gallon storage tank. 5 gallon bucket test performed in 50 seconds.



Applicant had bulldozer pulling water tank for watering of newly planted trees.



Hand irrigation from storage tank for newly planted trees.





Creek, pump, and trailer.



Applicant would lay down pvc pipe if bulldozer could not get close to new plantings.



POU.



Harvested timber that would be replanted.