

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 57-07632B
Exam Date: June 20, 2012

1. Current Owner:

LORRAINE S STEWART 29010 RIVER RD BRUNEAU ID 83604-5103 (208)834-2403 And

FLOYD P ADAMS 29010 RIVER RD BRUNEAU ID 83604-5103 (208)834-2403

2. Accompanied by: Floyd Adams

Phone No:

Address: 29010 River Rd; Bruneau ID 83604-5103

Relationship to Permit Holder: Permit holder

3. **SOURCE:** UNNAMED STREAM

TRIBUTARY: SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use:

2. Other water rights with the same point-of-diversion: None

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

UNNAMED STREAM L6 (SW¼NE¼) Sec. 32, Twp 05S, Rge 04E, B.M. OWYHEE County

Method of Determination: GPS

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	
05S	04E	32			1.1														1.1

Total Acres: 1.1

Method of Determination:

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

Aerial Photo Attached (required for irrigation of 10+ acres).

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
A0018581	Dayton Motor	1	Model 100RSPS	Red Jacket Model 1D189	

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

D. FLOW MEASUREMENTS

1. Pressure gage for sprinklers

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

E. FLOW CALCULATIONS

Measured Method:

 X Additional Computation Sheets Attached

11 sprinklers

33.2 gallons per minute X 0.00222800926 = 0.07 cfs

Theoretical 0.06 cfs

1.1 acres X 0.03 cfs = 0.03 cfs

Recommend 0.03 cfs**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

 $V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.1 \times 4.5 = 4.95 \text{ AF}$ $V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 15.5 \text{ AF}$ $V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 4.95 \text{ AF}$ **Recommend 4.95 AF**

2. Volume Calculations for Other Uses: None

G. NARRATIVE/REMARKS/COMMENTS

Ms. Stewart and Mr. Adams divert water from a drainage ditch or unnamed stream. A pump lifts the water an estimated 20 feet to the main pipe system. One section of the system flows to the north and west, around the northern part of the property. This area includes the grass to the west, north and east around the house. It also provides water to a garden on the east side of the property. The system to the south of the pump provides water to a pasture to the south of the house, along the driveway, and to a garden/lawn patch next to the garage.

Have conditions of permit approval been met? Y Yes No

H. RECOMMENDATIONS**1. Recommended Amounts**BENEFICIAL USE
IRRIGATIONPERIOD OF USE
03/15 to 11/15DIVERSION RATE
0.11 CFSANNUAL VOLUMETotals: 0.110 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 Sandra Thiel Date 5/23/2016

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Attachment To Water Right License
57-7632B

This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

R04E

T05S



- Point of Diversion
- Place Of Use Boundary



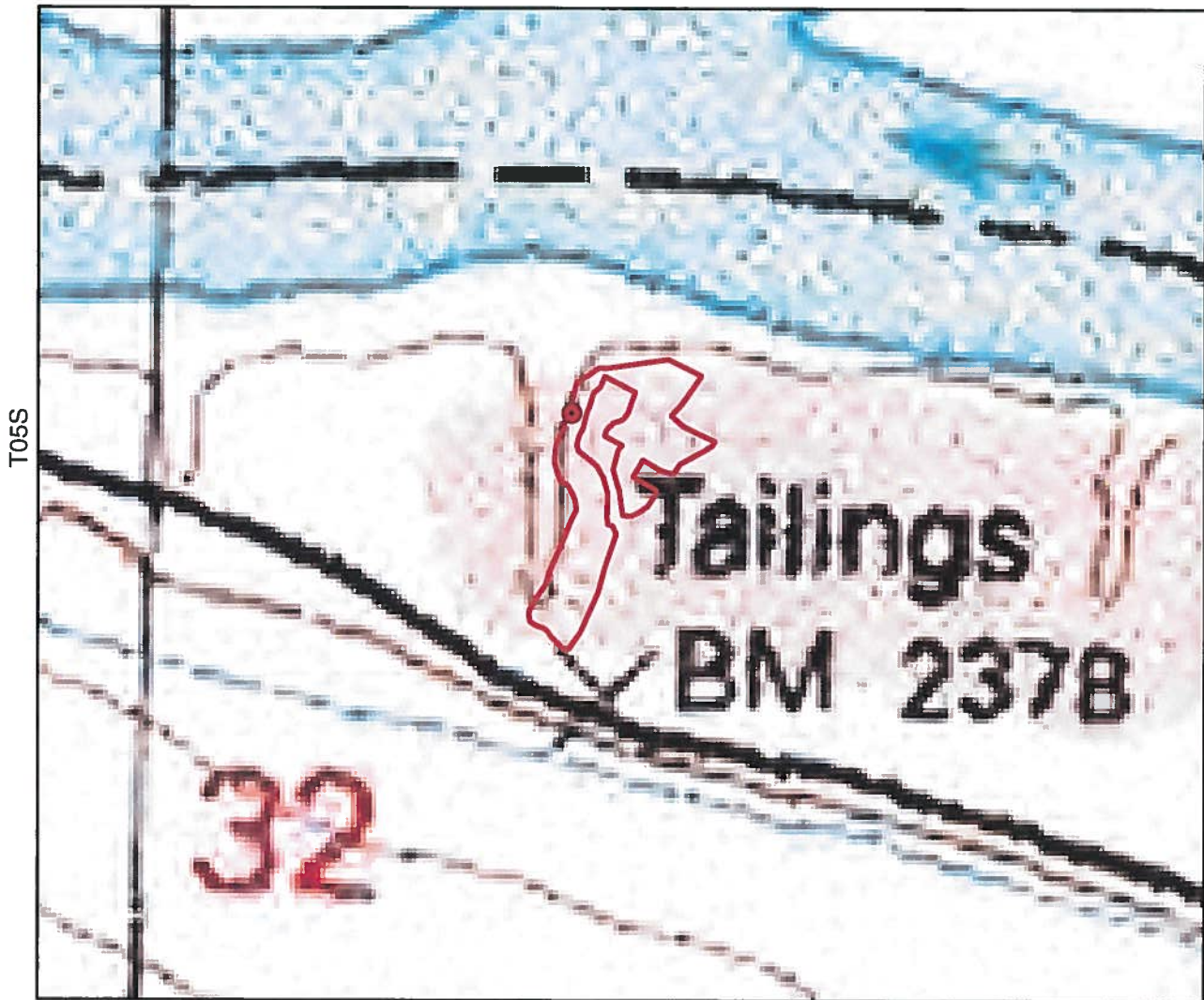
0 0.07 0.14 Miles

State of Idaho
Department of Water Resources

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R04E

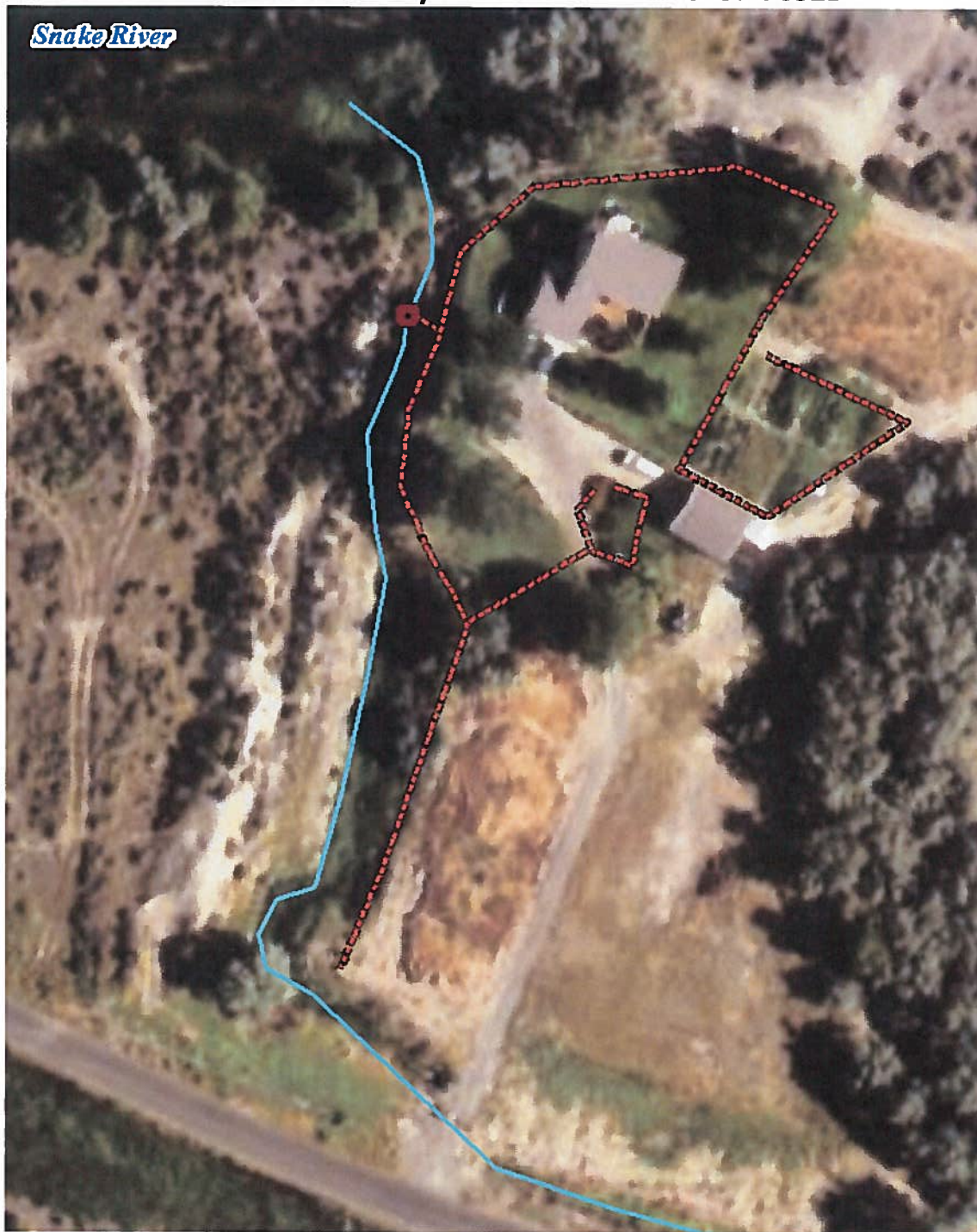


- Point of Diversion
- Place Of Use Boundary



0 0.07 0.14 Miles

Water Distribution System Permit Number 57-7632B



The water is diverted from a drainage ditch, shown in blue in the map. A pump lifts the water an estimated 20 feet to the main pipe system. One section of the system flows to the north and west, around the northern part of the property. This area includes the grass to the west, north and east around the house. It also provides water to a garden on the east side of the property. The system to the south of the pump provides water to a pasture to the south of the house, along the driveway, and to a garden/lawn patch next to the garage.

GROUNDWATER THEORETICAL ANALYSIS

FILE: 57-7632B

DATE: June 20, 2012

BY: Sandy Thiel and Dan Nelson

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times (HP) \times (EFF.))}{TDH}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

$$Q = \frac{(8.8) \times (\underline{1}) \times (0.70) = 6.16}{\underline{\hspace{10em}}} = \underline{0.06}$$

$$[(\underline{20}) + (\underline{34} \times 2.31)] = 98.54$$

LIFT FROM:

Measurement ()

Owner ()

Area estimate (x)

Well Logs ()

PSI FROM:

Measurement (x)

Owner ()

Estimate ()

Owner Gage ()

Booster (Y) (N)

NOTES ON PUMP:

Motor Make, Serial or ID

Dayton Motor Model 100RSPS

Pump Make, Serial or ID, rating

Red Jacket

Model 1D189

REMARKS:

Lift was estimated at approximately 20 feet to the drain

34 was the highest psi on the sprinklers

The sprinkler measurement was 33.2 gpm or 0.07 cfs

The theoretical calculation was 26.9 gpm or 0.06 cfs

PHOTOGRAPHER AND DATE OF PHOTOS Sandy Thiel, June 20, 2012
FILE NUMBER 57-7664



This is a picture of the pump on the unnummed drain

Water Ace
Catalog #R10L

Serial# 694-0303
Engineering# 2509D501



The lift from the water
in the drain to the
sprinkler system is
approximately 20 feet



This shows the access to the pump. The power source shown in the picture below is at the top of the ladder shown right



Power supply for the pump
Tag: A0018581



This panorama shows the irrigated area on the south side of the property



This is the irrigated land to the east of the house



Irrigated land between driveway and garage



House and land east of the house, showing the garden plot on the right side of the photo.