

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 79-7247

Exam Date: 8/26/2011

1. Current Owner: PAUL SAND
PO BOX 16
WHITE BIRD ID 83554
(208)839-9403
2. Accompanied by: Paul Sand
Phone No: (208)839-9403
Address: PO Box 16, White Bird, ID 83554 (**Physical Address: 405 River St., White Bird, ID 83554)
Relationship to Permit Holder: self

3. **SOURCE**

WHITE BIRD CREEK

TRIBUTARY

SALMON RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 79-14053 City of White Bird (service area boundary)
2. Other water rights with the same point of diversion: None

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

WHITE BIRD CREEK SE1/4NW1/4 Sec. 14, Twp 28N, Rge 01E, B.M. IDAHO County

Method of Determination: Garmin GPS map76S

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
28N	01E	14								.3									.3

Total Acres: 0.3

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 MakeHpMotor Serial No.Pump MakePump Serial No. or Discharge
Size

A0016829

GE

1 Hp

model # 5KC33PN2703AX

1-phase

jet-pump

1 1/2 inch

D. FLOW MEASUREMENTS**1. Measurements:**

5-Gallon Measurement from hydrant next to pump:
 $[(5 \text{ gal} \times 60 \text{ sec}) / 11 \text{ sec}] \times 0.00223 = 0.06 \text{ cfs}$

Theoretical:
 $[(8.8) \times (1 \text{ Hp}) \times (0.70 \text{ eff})] / [5 \text{ ft} + (40 \text{ psi} \times 2.31)] = 0.06 \text{ cfs}$

1 inch pipe conversion (from pump to distribution system) = 0.03 cfs

Recommend 0.03 cfs as permitted

2. Screen: 6" X 12" (1/4 inch screen slots)

Flow rate (cfs)/effective screen area (in sq.feet) = 0.03 cfs/0.5 sq.ft = 0.06 fps approach velocity (which does not exceed 0.5 fps)

E. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.3 \times 4.0 = 1.2 \text{ af}$

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 231 \times 1.9835 = 13.7 \text{ af}$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.2 \text{ af}$

F. NARRATIVE/REMARKS/COMMENTS

2 inch screened intake at the White Bird Creek with a 5 ft lift to a 1 Hp GE 5KC33PN2703AX 1-Phase jet pump, with 1 1/2 inch discharge to 1 inch buried PVC to a buried sprinkler system with various sprinkler nozzles if the different zones, and in some of the yard and garden were risers for hose attachments and various sizes of nozzles. During the field exam, 10 sprinklers ran at 1 time out of the 30 nozzles total (at 40 psi). The size of the nozzles could not be determined without removing the nozzles physically from the system, so the system was isolated to one hydrant by the pump to conduct a 5 gallon measurement (11 sec/5 gallons).

Have conditions of permit approval been met? ☒ Yes ☐ No (Mr. Sands installed the screened intake that Fish and Game advised him to install. Approach Velocity = 0.06 fps.)

G. 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	0.030 CFS	1.20 AF
<u>Totals:</u>		0.030 CFS	1.20 AF

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 ☐ Other

H. AUTHENTICATION

Field Examiner's Name

Sandy Hemenway

Date

9/8/2011

(+ 2/15/2012 added additional notes)

ump
house

1 Hp
SE
K633-
2N2703AX
1 phase
jet
pump
1 1/2"
discharge
to 1"
surged
PVC to
rose bibs
for
various
roses +
misc.
nozzles
+ some
zones
with
underground
pop-up
nozzles

POU

08/26/2011

POD

2"
screened
intake
at
White
Bird
CK.
(1/4" size
screen
mesh)

08/26/2011

79-7247 Sand

S. Hemenway



POU



POU

79-7247 Sand

S. Hemenway



Pou



Pou

79-7247 Sand

S. Hemerway



drive way

pump house

1st Ave

2''

POD 2''