

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-23001
Exam Date: 10/4/2016

1. Current Owner:
JERRY LEE INAMA PO BOX 33 GARDEN VALLEY ID 83622 (208)864-2199

2. Accompanied by: Jerry Lee Inama
Phone No: (208)781-0871
Address: PO Box 33, Garden Valley, ID 83622
Relationship to Permit Holder: Original Permit Holder

3. SOURCE:
SPRING

TRIBUTARY:
MIDDLE FORK PAYETTE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO
2. Other water rights with the same point-of-diversion: NO

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

SPRING NW¼NE¼NE¼ Sec. 15, Twp 09N, Rge 04E, B.M. BOISE County

Method of Determination: Permit application, ArcMap GIS tools, and handheld GPS used in the field.

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	
09N	04E	15	X																

Method of Determination: Satellite imagery, permit application, and on-site field visit paired with handheld GPS.

3.

X Delivery System Diagram Attached (required). Indicate all major components and distances between components.
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.

N/A 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
Spring	Unknown	0.75	Unknown	Unknown	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
N/A						
N/A						

2. Measurements: Unable to perform flow measurements in the field.

E. FLOW CALCULATIONS

Measured Method:

 X Additional Computation Sheets Attached

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Efficiency = 0.70

Depth to water = 30 ft.

psi = 40-60

hp = 0.75

See attached theoretical sheet.

Theoretical = 0.03 cfs

Permit	0.040 cfs
B.U. Standard Allowance	0.040 cfs
B. U. Proof Fee	\$50 → 0 to 0.20 cfs
Measurement or Theoretical Rate	0.03 cfs
License Recommendation	0.04 cfs

Because the calculated theoretical flow was within reason of the permitted rate, the permitted rate is still recommended. See theoretical worksheet and flow calculations supplement sheet.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$

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

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

2. Volume Calculations for Other Uses: Use is domestic, Standard as per Admin Memo 22.

G. NARRATIVE/REMARKS/COMMENTS

Field exam was completed by agent Justin Shearer on October 4th, 2016 and was accompanied by land owner Jerry Inama. Mr. Inama is the active permit owner since the assignment of permit was submitted by the original owner in May of 2005.

The system developed consists of one cistern that delivers water from a spring source uphill approximately 30' to the owner's home using a ¾ hp pump. There is no POD overlap for this source. During, the exam it was observed that this spring only produces water for domestic use at the owner's home, while irrigation and stockwater uses are covered under WR-65-23003.

Aerial imagery and on site use of GPS while in field were used to determine POD and POU locations. There is no POU overlap.

Based on the information provided by the owner, estimating the pumping level using the DRG map, and assuming average domestic discharge pressures, a theoretical rate of flow of 0.030cfs was calculated. Because the theoretical value is so close to the permitted value of 0.04cfs, it is safe to assume that the user is deserving of the permitted rate.

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>	<u>ANNUAL VOLUME</u>
DOMESTIC	01/01 to 12/31	0.04 CFS	0.6 AF
	<u>Totals:</u>	0.040 CFS	0.6 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 ☒ None

I. AUTHENTICATION

Field Examiner's Name  Date 10/31/2016

Reviewer _____ Date _____

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 65-13611
 Reviewer: Justin Shearer
 Date of Review: 10/4/2016

P/D No.:	Scenario 1	Scenario 2	Scenario 3
PUMP HORSEPOWER	0.75	0.75	0.75
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	30	30	30
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.04	0.03	0.03 0.03

The above calculates the formula =
$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.
 No Friction

Examiners Notes:

One small pump 3/4hp pump delivers water from the POD spring uphill approximately 30 ft to the POU home. Lift was estimated using the DRG map. An average range of discharge pressures were used under what we would expect to see for domestic use (from 40 to 60psi). Theoretical average flow rate for this system is 0.03cfs.

Source
ANDERSON CREEK
SPRING
GROUND WATER
SPRING
ANDERSON CREEK
GROUND WATER
PAYETTE RIVER
GROUND WATER
GROUND WATER
GROUND WATER
SPRING
SPRING
GROUND WATER
GROUND WATER
GROUND WATER
GROUND WATER
GROUND WATER
GROUND WATER
GROUND WATER
SPRING
GROUND WATER
SPRING
UNNAMED STREAM
PAYETTE RIVER
PAYETTE RIVER
GROUND WATER
GROUND WATER
GROUND WATER
GROUND WATER
GROUND WATER
GROUND WATER
SPRING
SPRING
SPRING
ANDERSON CREEK
ANDERSON CREEK
PAYETTE RIVER
PAYETTE RIVER
PAYETTE RIVER
PAYETTE RIVER
PAYETTE RIVER
ANDERSON CREEK
ANDERSON CREEK
ANDERSON CREEK
ANDERSON CREEK
ANDERSON CREEK
GOOSEBERRY CREEK
GOOSEBERRY CREEK
GOOSEBERRY CREEK
ANDERSON CREEK
ANDERSON CREEK
ANDERSON CREEK
GROUND WATER
ANDERSON CREEK
ANDERSON CREEK
GOOSEBERRY CREEK
CASTLE CREEK
CASTLE CREEK
CASTLE CREEK
SPRINGS
SPRINGS
GROUND WATER
GROUND WATER

[illegible]

Legend

— Line from POD to POU

□ Water Right POD

□ POU

SESE

10

SPRING

09N04E

NENE

15



Looking down at
submersible pump
system.



Cistern covered by
tarps and blankets
to prevent freezing.



View of Front of
home (POU)



Additional View of
POU