

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 31-7570

Exam Date: 9/18/2007

1. Current Owner: WALTER A GAY
628 W 300 S
BLACKFOOT ID 83221
(208)785-5457

2. Accompanied by: Owner
Phone No: (208)680-1472 (cell Phone)
Address: same as above
Relationship to Permit Holder: Self

3. SOURCE
SPRING

TRIBUTARY
IDAHO CREEK

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

SPRING SE1/4SW1/4NE1/4 Sec. 5, Twp 13N, Rge 36E, B.M.
CLARK County

Method of Determination: GPS Garmin, and field evaluation

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	
13N 36E 4										X							

Method of Determination: 2006 + 2004 NAIP Aerial Photography

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.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
708701					

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>

2. Measurements:

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method: Used Hazen-Williams Equation for Closed Pipe Flow to determine capacity of system to be 0.02 cfs, flow limited by the capacity of the system.

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: limited to single domestic by permit with no irrigation for 0.6 afa.

G. NARRATIVE/REMARKS/COMMENTS

Cement 16" culvert buried in hillside with 1 1/4 inch pipe drain, 1 foot past drain pipe connected to 1 inch pipe which runs to lower property delivers water to mobile home and five RV trailers at the place of use.

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	0.020 CFS	0.60 AF
<u>Totals:</u>		0.020 CFS	0.60 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
Source more accurately described as spring, due to buried diverting works

I. AUTHENTICATION

Field Examiner's Name Nate Arave Date 9/18/07

viewer Nate Arave Date _____

Hazen-Williams Equation for Closed Pipe Flow

Assumptions: Head Loss due to bends, couplings, & valves is negligible

$$Q_{cfs} = 1.318 C_h (\pi D^2/4) \times (D/4)^{0.63} \times (H/L)^{0.54}$$

Q = Discharge (cfs)

D = Pipe Diameter (ft) = 1/12 ft

L = Pipe Length (ft) = 2516.2 ft

H = Elevation Drop (ft) = 160 ft

C_h = Values for Types of Pipe = 150

150	-Plastic (PVC)	110	-Riveted Steel
140	-Very Smooth	100	-Old Cast Iron
130	-Cast Iron	80	-Badly Corroded Cast Iron
120	-Wood, Concrete		

$$Q_{cfs} = 1.318 \left(\frac{150}{C_h} \right) \left[\pi \left(\frac{0.08}{D} \right)^2 / 4 \right] \times \left(\frac{0.08}{D} \right)^{0.63} \times \left(\frac{160}{H} / \frac{2516}{L} \right)^{0.54}$$

$$Q_{cfs} = \underline{0.02} \text{ cfs}$$

Permit # 31-7570

Comment Report

31-7570

1. narave 9/19/2007 Field Report Narrative

Comment: Cement 16" culvert buried in hillside with 1 1/4 inch pipe drain, 1 foot past drain pipe connected to 1 inch pipe which runs to lower property delivers water to mobile home and five RV trailers as the place of use.

8. narave 9/19/2007 overlap analysis

Comment: no overlapping rights with POU or POD

9. narave 9/19/2007 source change

Comment: This is not a true change in source, the permit was developed on a spring tributary to Idaho Creek in the correct QQ

10. ZIMMERMA 6/29/1993 MORATORIUM EXEMPTION

Comment: This permit is located within the Eastern Snake River Plain Moratorium boundary; however, its domestic use is within the acceptable parameters of the Moratorium guidelines. DIVERSION DESCRIPTION 1-1/4" pipe, gravity fed 3/4 mile to place of use.

Type	WR #	Owner	Source	TRS	NENE	INWNE	SWNE	SENE	NENW	INWNW	SWNW	SEW	NESW	INWSW	SWSW	SESW	NESE	INWSE	SWSE	SESE	Total
Right	31 4086	UNION PACIFIC RAILROAD CO. OREGON SHORT LINE RAILROAD CO.	SPRING	13N36E4								X									0
Partl	31 7570	WALTER A GAY	UNNAMED STREAM	13N36E4									X								0
Right	31 10208	DONALD W KEY SANDRA I KEY	SPRING	13N36E4									X								0
Right	31 10962	UNITED STATES OF AMERICA ACTING THROUGH	BEAVER CREEK	13N36E4											23				X		23
Right	31 33	ANNA TURMAN	IDAHO CREEK	13N36E4											X						23
Right	31 292	ANNA TURMAN	IDAHO CREEK	13N36E4												23					23
Right	31 178	UNION PACIFIC RAILROAD CO.	SPRING	13N36E4								X									0
Right	31 195	NORMA L ROSE PRESTON L ROSE	BEAVER CREEK CHICKEN CREEK	13N36E4			4		18			6									29
Right	31 7570	WALTER A GAY	SPRING	13N36E4									X								0





