

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 29-14131

Exam Date: 5/12/2015

1. Current Owner: GLENN AUBREY
PO BOX 275
LAVA HOT SPRINGS ID 83246
(208)776-5559

And

MARY LOU AUBREY
PO BOX 275
LAVA HOT SPRINGS ID 83246
(208)776-5559

2. Accompanied by: In-office field exam

Phone No:

Address:

Relationship to Permit Holder:

3. **SOURCE**

TRIBUTARY

GROUND WATER

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:**

GROUND WATER

L8 NE1/4SE1/4

Sec. 21, Twp 09S, Rge 38E, B.M.

BANNOCK County

Method of Determination: Aerial photography and field exam (6/24/1986).

2.

PLACE OF USE: HEATING

Tw	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>	
09S	38E	21													X			X	
															L 8			L 1	

Method of Determination: Aerial photography and field exam (6/24/1986).

3. _____ 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.
- ___X___ Aerial Photo Attached (required for irrigation of 10+ acres).
- _____ Photo of Diversion and System Attached.

D. FLOW MEASUREMENTS

1. Measurements: In-office field exam. No measurement required.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: Rate of diversion is based off of a field exam done on 6/24/1986.

Q= 0.04 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/ A

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \text{N/A}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \text{N/A}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \text{N/A}$$

2. Volume Calculations for Other Uses:

Volume is based off a volume calculation from right 29-7657.

Volume = 1.5 acre-feet

G. NARRATIVE/REMARKS/COMMENTS

In-office field exam. This right replaces water right 29-7657 which was licensed in May 1990 but was not claimed in the SRBA. The SRBA court disallowed right 29-7657 (unclaimed). The rate of diversion and volume for this right was based on the calculations found under right 29-7657. Heating is for the same home and restaurant found under right 29-7657.

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>
HEATING	01/01 to 12/31	0.040 CFS	1.5 AF
<u>Totals:</u>		0.040 CFS	1.5 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

I. AUTHENTICATION

Field Examiner's Name Blake Jordan Date 6/12/2015

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Water Right License
29-14131

38E

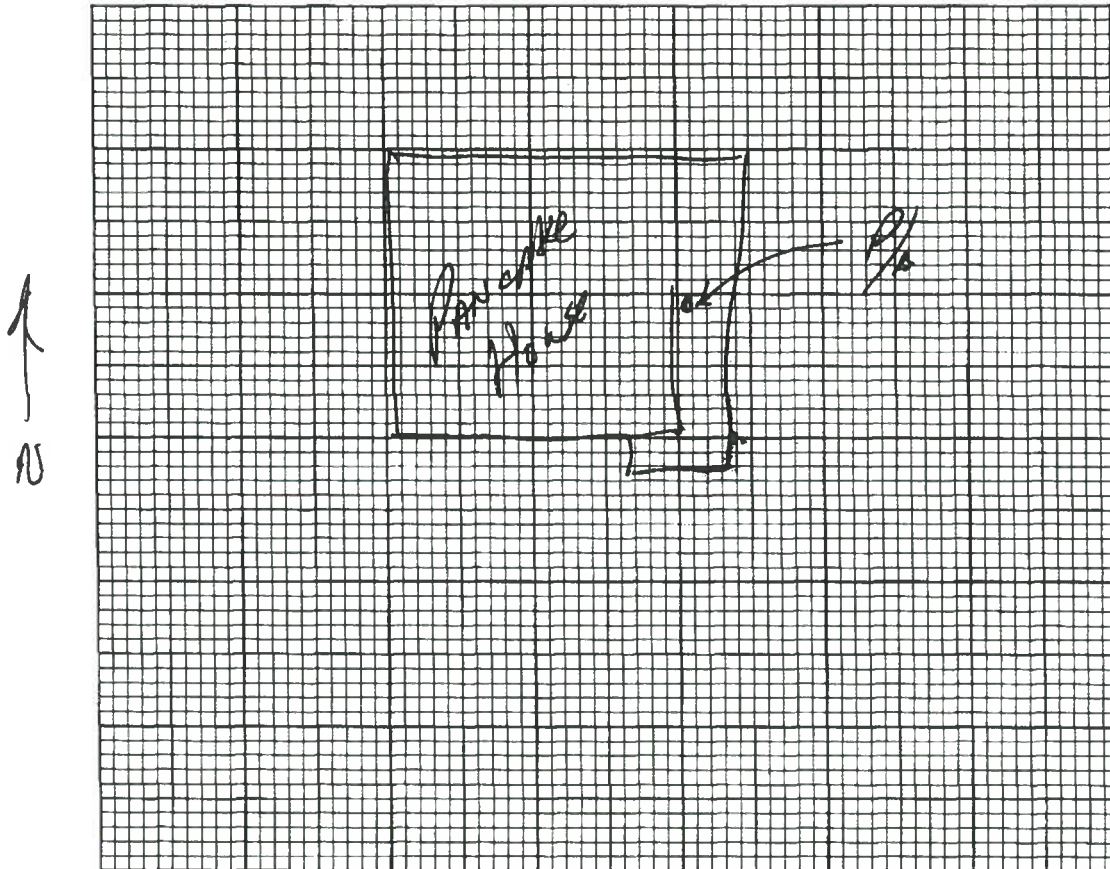


- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

0 0.015 0.03 0.06 Miles



10. Other water rights on these lands N/A
11. Other water right diverted from same p.d. N/A
12. **Diversion and Delivery System Diagram:** Indicate all major components and distances between components. Indicate ditch size/pipe i.d. as applicable. Indicate on systems with measurement port the distance between the port and the nearest component/pipe bend/restriction both upstream and downstream, and the inside pipe diameter at the measurement port. On multiple diversion systems indicate how diversion systems are connected.



13. ☐ Photo of Diversion & System Attached

☒ Aerial Photo of Place of Use Attached or Map of Irrigated Acreage Attached

14. Remarks _____

15. Recommended Amendments

- ☐ Change P.D. as reflected above
- ☐ Change P.U. as reflected above

- ☐ Add P.D. as reflected above
- ☐ Add P.U. as reflected above

- ☒ None
- ☐ Other

16. Examiner's/Consultant's Signature Richard L. Lenz Jr. Date 6-24-86

Consultant's License Number _____

IDWR Director's Authorization to Conduct

Beneficial Use Examination _____

Date

MAY 29 1990

CONSULTANT SEAL

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
LICENSING REPORT

RECEIVED

SEP 19 1988

29-7657

Permit No.

Department of Water Resources

1. Measurement Calculations

a) Field Measurement Calculations (Include theoretical capacity and system capacity)

1 hp pump

$$\frac{1 \text{ hp} (.8) (2.814)}{20 \text{ ps.} (2.31) + 9'} = .13 \text{ cfs. Theoretical,}$$

recommended .04 cfs for ~~Heating~~ ~~Domestic~~

Assigned 1.2 afa for ~~Heating~~, even though he does not have any lawn, due to the fact he lives in the pancake restaurant and everything surrounding the restaurant is pavement.

b) Volume Calculations for Irrigation:

$$\begin{aligned} V_{IR} &= (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \text{NA} \\ V_{DR} &= [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = \text{NA} \\ V &= \text{Smaller of } V_{IR} \text{ and } V_{DR} = \text{NA} \end{aligned}$$

c) Volume Calculations for Other Uses:

2. Overlap Review

a) Other water rights with same place of use: NA

b) Other water rights with same point of diversion: NA

c) Analysis: NA

MICROFILMED

MAY 29 1990

RECOMMENDED AMOUNTS

3.	Permit No.	Priority	Amount	App. Date	Date Proof Submitted	System Capacity

4. Permit Holder: _____

Address: _____

5. Source: _____ tributary to _____

6. Beneficial Use	Period of Use		Rate of Diversion	Annual Volume
	From	To	Q (cfs)	V (afa)
Heating ~~Domestic~~	1-1	12-31	.04	1.2 afa

Allowable Maximums: .04 1.2 n/a

7. Point(s) of Diversion:

[illegible]

8. Place(s) of Use

[illegible]

9. Recommended Conditions/Remarks: Mr. Aubrey was using the heated
water to heat 2 radiators.

MICROFILMED

~~MAY 29 1990~~

10. 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

11. Examiner's Signature Richard Tenney Jr. Date 6-25-86

Checked in Regional Office by H. W. S. Jones Date 9-2-86

Approved in State Office by _____ Date _____

RATE OF FLOW AND ANNUAL VOLUME FOR HEATING USE

INPUT:

Geothermal Source Temperature	=	120 Degrees
Area of Floor Space	=	2500 Square Feet
Temperature Outside	=	0 Degrees
Temperature Inside	=	70 Degrees
Building Efficiency	=	0.44 *
Days per		

RATE OF FLOW AND ANNUAL VOLUME FOR HEATING USE

INPUT:

Geothermal Source Temperature	=	120 Degrees
Area of Floor Space	=	2500 Square Feet
Temperature Outside	=	0 Degrees
Temperature Inside	=	70 Degrees
Building Efficiency	=	0.44 *
Days per year temp below 70 Degrees	=	90 Days
Hours per day temp below 70 Degrees	=	18 Hours

FORMULAS:

RATE;

GPM = System Cooling Load (BTU/HR)

/[Temp.Drop Across the System*(500)]

System Cooling Load (BTU/HR) = Building Efficiency*Area

*(Temp.inside-Temp.outside)

Temp. Drop Across the System = (0.6)*(Geothermal Temp.-Temp. Reqd.)

Temp. Required = 70 Degrees

VOLUME;

Annual Volume = CFS*1.9835*Hours/24*Days

OUTPUT:

RATE OF FLOW	=	5.13 GPM	0.011 CFS
ANNUAL VOLUME	=		1.5 ACRE FEET

MISCELLANEOUS INFORMATION:

- * 0.28 Best energy efficiency **
- 0.44 Good energy efficiency
- 0.67 Average energy efficiency
- 1.11 Poor energy efficiency

MicroFILMED

MAY 29 1990

**Source Administrator, s Memorandum DATED MAY 9, 1984