

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONExam Date: 6/26/2026

1. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.q)? X Y N
- a. X Irrigation of 5 acres or less
- b. Storage of up to 14.6 AF for stockwater purposes only
- c. Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
- d. Other < >

Comment: N/A

2. Current Owner: Archer Heights LLC

Owner of Record Correct? X Y NAddress of Record Correct? X Y N

If No Explain:

3. Beneficial Use Fees have been paid:
- X
- Y
- N
- Receipt No: W053152

4. Source: Tributary:
- Spring Anderson Creek

Method of Determination: GIS, Idaho Tax Parcel Data, and the Permit Holders Statement of Completion for Proof of Beneficial Use (Proof Statement).Change in Source: Y X N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: Overlap ?
-
- Yes
- X
- N

Water Right No.	Source	Purpose of Use	Basis
N/A			

Comments: There are no other Water Rights (WR) overlapping the permitted place of use (POU).

2. Other water rights with the same point of diversion: Overlap ?
-
- Yes
- X
- N

Water Right No.	Source	Purpose of Use	Basis
N/A			

Comments: There are no other WR's overlapping the permitted point of diversion (POD).**C. DIVERSION AND DELIVERY SYSTEM**

1. Location of Point(s) of Diversion:

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Spring		SE	NE	NW	24	09N	04E	B.M.	Boise

Method of Determination: GIS and Idaho Tax Parcel Data.Change in POD? Y X N Amendment Required? Y X N

2. Place of Use: Irrigation, Heating

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	24					0.5, H												0.5
		Lot #																	
Total Acres =																			0.5

Method of Determination: GIS, Idaho Tax Parcel Data, 2025 Google Earth and NAIP Aerial Imagery.Change in POU? Y X N Amendment Required? Y X N

3. Diversion System Information

Description: According to a phone conversation with the permit holder on June 25th, 2026, and their Proof Statement the heating diversion system consists of a French drain from a hot spring. Water is then gravity fed to a ½ hp pump to pipes under the floor of the structure and vented before exiting the system. Water for irrigation is diverted from the spring where water is cooler.

- ☐ Delivery System Diagram Attached. (mark all major components and distances between components)
- ☒ Aerial Photo indicating the location of the recommended POD and POU.
- ☒ Aerial Photo Attached (required)
- ☐ Photo of Diversion and System Attached

3. Diversion Id No.*	Motor Make	HP	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
N/A					

*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						

2. Measurement Comments: No measurement is required for permits qualifying for an in-office examination according to the IDAPA Beneficial Use Examination Rules.

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

Measured Method: According to Administrative Application Processing Memo #17 the standard diversion rate/acre for the irrigation of 5 acres or less is 0.03 cfs/acre. The calculated diversion rate based on 0.5 confirmed acres of irrigation is 0.02 cfs rounded. Since the permit authorized 0.01 cfs for that's the greatest I can recommend for licensing. According the permit holders Proof Statement and a phone conversation with the permit holder on June 25th, 2026, the diversion system is gravity fed. I recommend the permitted diversion rate for heating be carried to the license. I am recommending a diversion rate of 0.02 cfs for heating and 0.01 cfs for irrigation or 0.03 cfs total.

(0.5 confirmed acres of irrigation) * (0.03 cfs/acre) = 0.015 or 0.02 cfs rounded

Administrative Application Processing Memo #17 Calculation = 0.02 cfs

Permit allowed = 0.03 cfs

Total Recommendation = 0.03 cfs

Comments: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \text{(See Comment)}$
I.R.

$V = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \text{(See Comment)}$
D.R.

$V = \text{Smaller of } V_{\text{I.R.}} \text{ and } V_{\text{D.R.}} = \text{(See Comment)}$

Comments: The permit authorized irrigation diverting from a spring. If a permit authorizes irrigation diverting from a natural flowing source or spring a recorded diversion volume is not required at licensing according to the IDAPA Beneficial Use Examination Rules 37.03.02.035.01h.i.vii. I am not recommending a diversion volume for irrigation.

X Additional Computation Sheets Attached

2. Volume Calculations for Other Uses: After a phone conversation with the permit holder, they provided the necessary information to determine a recommended diversion volume including the floor area (200 ft²) and the general efficiency of the system based on the diversion system description. A heating calculation spreadsheet was utilized to make a diversion volume recommendation for heating. The permit holder also confirmed they use hot water for a bathtub but not very often. According to online research the average American takes 1 bath per week. A document titled Rural and Domestic Water Requirements indicated the average bathtub uses 35 gallons per fill. I am recommending a diversion volume of 0.8 af for heating.

(52 weeks) * (35 gallons) = (1,820 gal) / (325,850 gal) = 0.0005 or 0.1 af rounded.

G. PURPOSE OF USE

Irrigation X Y N # Stock N/A Domestic # of Homes N/A

Other: Heating

Change in Purpose of Use? Y X N

Method of Determination: GIS, Idaho Tax Parcel Data, 2025 Google Earth/NAIP Aerial Imagery, and the permit holders Proof Statement.

H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-office licensing examination. The permit authorized heating and the irrigation of 0.5 acres diverting from a spring tributary to Anderson Creek. 2025 Google Earth/NAIP Aerial Imagery and a phone conversation with the permit holder confirmed the development of heating and the irrigation of 0.5 acres of irrigation within the development period. According to a phone conversation with the permit holder on June 25th, 2026, and their Proof Statement the heating diversion system consists of a French drain from a hot spring. Water is gravity fed to a ½ hp pump to pipes under the floor of the structure and vented before exiting the system. Water for irrigation is diverted from the spring where water is cooler. A condition on the permit requires the permit holder to install a lockable controlling works granting the watermaster suitable control of diversion. The permit holder confirmed on their Proof Statement a lockable device was installed on the diversion works.

The standards set in Administrative Application Processing Memo #17 was used to make a diversion rate recommendation for irrigation. Since the diversion system is gravity fed I recommend permitted diversion rate for heating be carried to the license. To make a diversion volume recommendation for heating additional information was required from the permit holder. After a phone conversation with the permit holder on June 25th, 2026, enough information was provided including the system design and the floor square footage of the heated structure (200 ft²) to make a diversion volume recommendation for heating. Online research and a document titled, Rural And Domestic Water Requirements determined a diversion volume for bathtub use. The calculation spreadsheet used to determine a recommended diversion volume for heating is attached to this report. Since the permit authorized diversion from a spring for irrigation a recorded diversion volume is not required at licensing according to the IDAPA Beneficial Use Examination Rules 37.03.02.035.01h.i.vii. All conditions of permit approval have been met, and development of beneficial use was confirmed within authorization on the permit. Therefore, I am recommending a 0.03 cfs diversion rate and 0.8 af diversion volume for heating use.

Conditions 01R, R05, 027, and condition #6 on the permit should remain on the license. Condition R67 should be changed to X31 because irrigation is less than 1.0 acre. Condition 01H should be changed to R02 as is standard with licensing. Condition 121 should be changed to 103 as is standard with licensing.

Have conditions of permit approval been met? X Yes No

I. RECOMMENDATIONS

1. Recommended Amounts:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Irrigation	03/15 – 10/31	0.01 CFS	N/A
Heating	01/01 – 12/31	0.02 CFS	0.8 AF
<u>Totals:</u>		0.03 CFS	N/A

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

J. AUTHENTICATION**Field Examiner: Skyler Cheever – Water Resource Agent, Sr – State Office**

Field Examiner's  Date 6/26/2026

Reviewer  Date 6/29/2026

Field Exam Map

Map showing the authorized point of diversion (yellow point), irrigation place of use (orange outline), and heating place of use (green outline).



2025 Google Earth Aerial Imagery



Heating, and Cooling Energy Estimator*

Heating Estimator

FloorArea 200 ft²
 HeatLoss kBTu/h
 HeatSqFt 50 kBTu/h-ft²→
 HeatReqd 10.0 kBTu/h
 HeatHours 1500 Hours/year

Read Me

Read Me
 GPMpTonH 3 Gal/min
 GPMpTonC 0 Gal/min
 Heating 225000 Gal/year
 Cooling 0 Gal/year
 Total 225000 Gal/year
 30080 Cu.Ft./year
 0.691 AcreFt/year

9.5 gpm / 2 tons =
 4.75 gpm/ton

HeatHours Estimates			
Region		Low	High
South	House	600	800
	School	200	400
	Office	200	700
Mid-USA	House	800	1000
	School	300	500
	Office	700	900
North	House	1000	1500
	School	500	600
	Office	900	1100

HeatSqFt Estimates (kBTu/h per 1000 ft ² of Floor Area)					
Region		Poor Quality	Std. Quality	Hi. Quality	Super Eff.
South	House	30	20	15	10
	School	30	22	15	10
	Office	22	18	14	11
Mid-USA	House	40	32	25	16
	School	35	27	20	13
	Office	25	22	15	12
North	House	50	40	30	20
	School	40	30	25	15
	Office	30	24	18	13

Cooling Estimator

HeatGain kBTu/h
 CoolSqFt 14 kBTu/h-ft²→
 CoolReqd 2.8 kBTu/h
 CoolHours 300 Hours/year

CoolHours Estimates			
Region		Low	High
South	House	1100	1600
	School	600	1000
	Office	1200	1800
Mid-USA	House	800	1000
	School	400	550
	Office	700	1100
North	House	200	300
	School	200	300
	Office	300	600

CoolSqFt Estimates (kBTu/h per 1000 ft ² of Floor Area)					
Region		Poor Quality	Std. Quality	Hi. Quality	Super Eff.
South	House	32	25	17	10
	School	65	53	36	31
	Office	35	28	20	15
Mid-USA	House	30	22	15	9
	School	60	48	38	28
	Office	30	25	17	14
North	House	28	20	14	8
	School	50	42	30	26
	Office	28	22	16	12

* adapted from HeatCoolWater.xlsx with permission from the spreadsheet author, Dr. Steve Kavanaugh