

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 55-13885
Exam Date: 08/23/2019

1. Current Owner:
THUNDER MOUNTAIN RESOURCES INC 11770 W PRESIDENT DR STE F BOISE ID 83713
2. Accompanied by: Jim Collard
Phone No: 208-658-1037
Address: 11770 President Drive, Suite F
Boise, Idaho 83713
Relationship to permit Holder: Chief Operating Officer

3. SOURCE:
SPRINGS

Tributary
WILLIAMS CREEK

Method of Determination: Site visit and GIS examination

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
55-12180	Williams Creek	Stockwater	Decreed

Comments: 55-12180 is an instream stockwater right for Williams Creek, held by the BLM. The BLM owns much of the surrounding land, including some of the land in the same QQ's as the POU for this right. There are no concerns of overlap.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: No Overlap

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

SPRINGS L7 (SW¼ SW¼), Sec. 3, Twp 08S, Rge 05W, B.M. OWYHEE County

Method of Determination: Site visit, GPS point and GIS examination

PLACE OF USE: STOCKWATER

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08S	05W	3											X						

The place of use consists of a water trough about 100 feet down slope of the spring point of diversion.

Method of Determination: Site visit and GIS examination

3.

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

X 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).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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: 5 gallon bucket fill time (1) 77 sec, fill time (2) 79 sec

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: 5 gallon bucket fill

 $77 \text{ sec} + 79 \text{ sec} / 2 = 78 \text{ sec}$ $(5 \text{ gal} / 78 \text{ sec}) * 60 \text{ sec} = 3.85 \text{ gpm}$ $3.85 \text{ gpm} * 0.002228 = 0.009$ **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: N/A

G. NARRATIVE/REMARKS/COMMENTS

The source for this right is a spring which flows into Williams Creek. The permit described the spring as tributary to Jordan

Creek. The site visit and GIS examination confirmed it is actually tributary to Williams Creek. Permit processing memo #5 states that the Department can clarify some items, such as source names that do not conform to the Department's data entry standards, as long as it is documented in the water right file. The tributary on the water right is simply a descriptor and does not change anything with the actual source. Because of this, the tributary has been updated on the license recommendation and an amendment should not be required.

Additionally, the point of diversion (POD) location description on the permit did not include a government lot number, however the most current PLSS data shows this POD located in government lot 7 (SW $\frac{1}{4}$ SW $\frac{1}{4}$), of Sec. 3, Twp 08S, Rge 05W. This has been updated on the license recommendation and because there was no physical change to the location of the POD, an amendment should not be required to make this update.

The spring is captured by a spring box, which was not visible at the time of the exam and likely buried in moss and wetland grasses. The captured water runs through a buried pipe to a spout that fills a water trough. We conducted two timed five gallon bucket fills from the spout to obtain our flow rate measurement. This calculation came to 0.009 cfs. This will be rounded up to 0.01 cfs as the flow rate recommended for licensing.

The area around the mine site is open range cattle country and Jim Collard said they wanted the stockwater trough to try and encourage the cattle to stay out of the stream. The mining company does not directly own cattle but there were several cattle located throughout the site during the exam.

There were two spring PODs described on the permit, however only the one described above had been developed at the time of the exam, and therefore only this POD is recommended for licensing. Additionally, no domestic use had been developed at the time of the exam and therefore no domestic use is recommended for licensing. This was also explained to the water right holder.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	
STOCKWATER	01/01 to 12/31	0.01 CFS	

Totals: 0.01 CFS

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

Scott Storms - Water Resource Agent, Senior

Field Examiner's Name

Date

9/3/2019

Reviewer

Date

9-3-19



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

0 0.0075 0.015 0.03 Miles



Diagram 55-13885

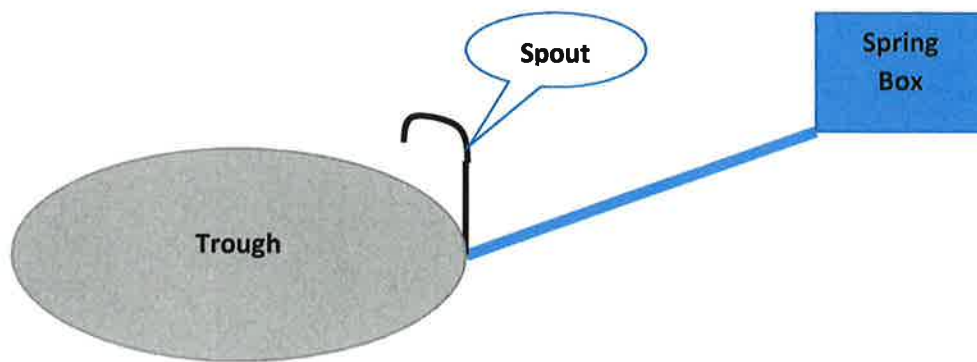




Figure 1. Point of diversion, buried spring box



Figure 2. Cattle trough