

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-07858

Exam Date: 7/10/2017

1. Current Owner:
ROD STUTZKE PO BOX 433 MURRAY ID 83874 (208) 512-9144

2. Accompanied by: Rod Stutzke

3. **SOURCE:**
EAST FORK EAGLE CREEK

TRIBUTARY:
PRICHARD 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 SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

EAST FORK EAGLE CREEK SW¼SW¼ Sec. 12, Twp 50N, Rge 05E, B.M. SHOSHONE County

Method of Determination: Maps and GPS. POD located at -115° 46.293, 47° 41.467

2.

PLACE OF USE: MINING

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	05E	12											X						

Method of Determination: Google Earth and Arcmap.

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
	Westinghouse	5			

*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
Flowmeter	Panametric	GE	PT878	08448	2mg	3/28/17

2. Measurements:

Beginning flow rate of 8682 gal

Ending flow rate of 10902 gal

 $10902 - 8682 = 2220 \text{ gal} / 10 \text{ min} = 222 \text{ gpm or } 0.49 \text{ cfs}$ **E. FLOW CALCULATIONS**

Measured Method: Theoretical pumping equation attached for verification of flow measurement.

X Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

2. Volume Calculations for Other Uses:

Operating weeks = 24

Running wash plant days per week = 3

24 weeks x 3 days = 72 operating wash days

Running hours each day = 5

72 days x 5 hours = 360 wash hours

360 hours x 60 minutes = 21,600 operating minutes

21,600 x 222 gpm = 4,795,200 gal per season

4,795,200 / 325,850 = 14.7 acre-feet

G. NARRATIVE/REMARKS/COMMENTS

Field exam with the applicant, Rod Stutzke, showed a mine using a water from the East Fork of Eagle Creek. Water was supplied by an old 15hp pump that was from an old navy ship. There was an adequate space to perform a flow measurement using the GE Panemetric Flowmeter. Measured showed the pump was able to divert 222 gpm or 0.49 cfs. Point of diversion was visible and screened properly. From the pump, water went up an incline to where the trommel was located for material washing.

Mr. Stutzke said they generally operated about 24 weeks a year. He couldn't give a for sure time of when they started and stopped because that was dependent on the weather. He said they usually washed material about 3 days a week and were generally finished in about 5 hours. Using that information, we determined they operated about 360 hours a year. Using they diversion rate and operating hours, we were able to determine an annual volume of 14.7 acre-feet. It was debated whether to change the season of use from year round use to something smaller. Because the weather can change and seasons can be long or short, the year round season will remain on license.

Conditions 26A, 054, and 106 will be removed from license as they are meant for permits only. All other conditions will remain. No overlap concerns.

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>
MINING	01/01 to 12/31	0.49 CFS	14.7 AF
	<u>Totals:</u>	0.490 CFS	14.70 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

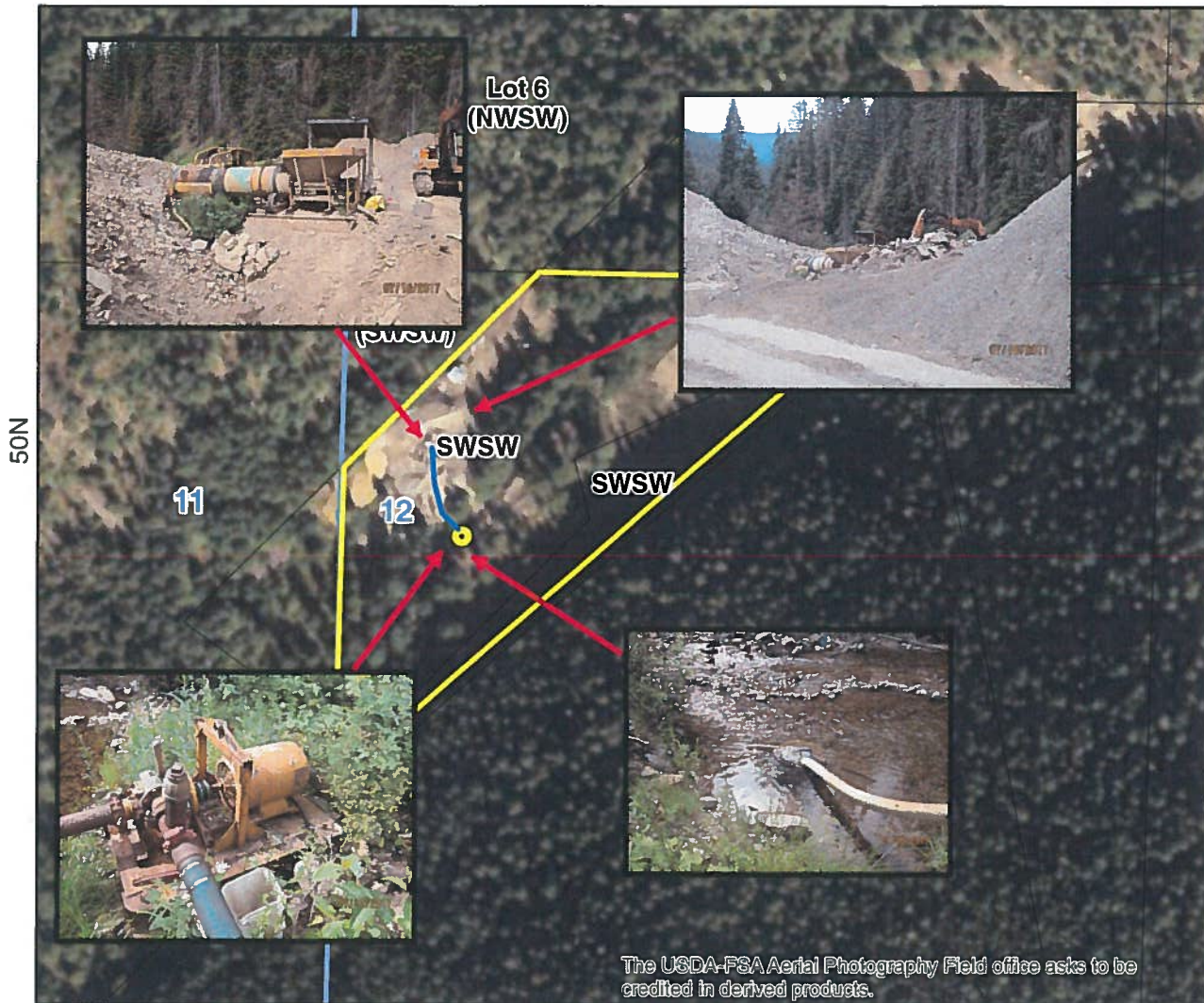
I. AUTHENTICATIONField Examiner's Name Adam Funder Date 2/13/2018

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Attachment to Field Exam
94-7858

MINING / SYSTEM DIAGRAM

05E



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

0 0.035 0.07 0.14 Miles



THEORETICAL PUMPING EQUATION FOR WATER RIGHT 94-7858

Flow measurement was performed on system using the GE Panametric meter which equaled 222gpm. During the exam I determined it was a 15hp pump running at an unknown psi and running about 100 feet up a hill to the place of use. The theoretical pumping equation is just a 2nd verification of the measurement.

PUMP EQUATIONS WATER RIGHT No. 94-7858						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	15	211.0204	0.8	100	48
Q =		0.501 cfs	225.0 gpm			



Point of diversion with fish screen.



Very old 15hp pump.

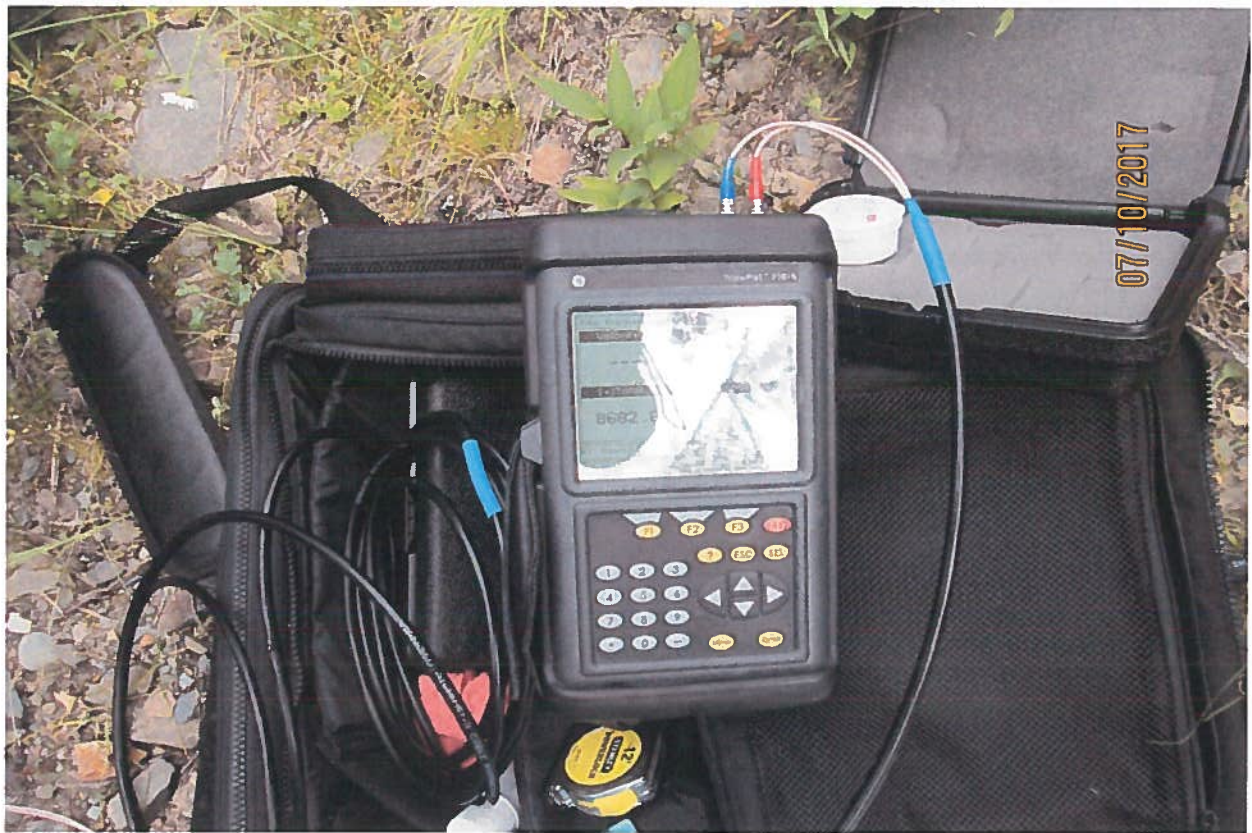




15hp Westinghouse pump.



Flow measurement performed using GE Panametric Meter.



Wash plant.

