

- (A) Roba Bros Mine
- (B) Eley accessible 42 miles from Congon city
- (1) Grant County T 16 S 7 R 29 E ~~Showing~~ ~~and~~ ~~unbroken~~
- (2) use forest map
- (3) 24 miles to Seneca - Rail Road ^{1 mile} - forest Road
- (5) Roads good 2 miles possible Imp
- A bearable
- 6 forest some telestone) (Mar (Congon city) telegraph boundary
- 12
- 1 Mountainous Elev 5200
- 2 Timbered Grass land
- 3 80 — 20 below zero
- A Rain 3 in snow 4 feet

②

- open around
- 4 water spring creek
 - ① Drinking water spring
 - (7) no power available
 - (8) timber Pine Tomarack fir
 - 9 wood on property fuel Oil 9 1/2 T
 - (11) no adjoining properties
 - 12 Baker
 - 0 Discovered March 23, 1934
 - 1 no past ownership
 - 2 Development 2 shafts

(3)

(3) 10 ton milled and milled

(4) Gold and silver \$2000

(5) ~~no~~ Permanent Geological Report

E Joint avenue strip

1 yellow pon 20 acres located March 23, 1934

F cabin mill shed and shaft shed

G drilling small mill

3 2 shafts 145 foot - 165 foot

several open cuts

F ~~of~~ beams mastilez

(4)

at present this property is punched out
but for other prospects will do some
prospecting this winter on this
property

Original of report of D.K.Mackay filed with Hachney-Johnson Claim file

Grant Co

R E P O R T

o n

THE ROBA BROTHERS MINE

Flagtail Mountain

MALHEUR NATIONAL FOREST

OREGON

November, 1937

By:

D. K. Mackay

INTRODUCTION:

The Roba Brothers Mine is located in the Malheur National Forest about 17 miles, airline, southwest of John Day, on the west side of Flagtail Mountain. The mine is about 3/4 mile west of the west lookout station.

Details regarding location of the claims by section, township and range were recorded on a map which unfortunately was left at the Assay Office in Baker when the samples from the mine were placed in the laboratory, and these details are not available at present.

Entrance to the area is effected from the Burns Highway, which extends southward from John Day. A country road leaves this highway towards the south near the Masonic Camp Grounds, about 12 miles south of Canyon City. The route is then westward to the Forest Service road which passes along the west side of Flagtail Mountain. A sign on the road in that locality indicates the faint truck-trail which leads to the mine, about 1 mile distant.

On October 31st the Roba Brothers asked the advice of this Department as to whether to continue or abandon work at their mine. They stated the deposit consisted of a mineralized seam in basalt which in places contained high values in gold but which

had pinched out so that little or no gold had been encountered in recent operations.

The property was examined by the writer November 2d. Geological work of the reconnaissance type was done and samples taken over the claim for assay by the laboratory at Baker.

PHYSICAL CONDITIONS:

While the topography of the area is rugged, there is a heavy cover of residual soil which supports a rather thick forest growth. The mine is well up on the west side of Flagtail Mountain.

In view of the thick mantle of soil and scarcity of outcrops it seemed remarkable that the Roba Brothers had discovered the small mineralized "seam" at all. Inquiries disclosed that the brothers had panned the area very carefully and when "colors" were obtained from the soil of the hillside they traced the gold to its source - the "seam" referred to.

A photograph was taken to show the dump and exterior of the mine. The roll of film containing it was sent away for developing and printing and as soon as the print is available it will be forwarded.

GEOLOGIC CONDITIONS:

In view of the fact that the Roba Brothers reported the country rock to be basalt, it was surprising to find that it was, instead, a dark-gray to brown sandstone which sometimes appeared bluish on fresh surfaces, and which resembled basalt because of its color, hardness, and fineness of grain. This sandstone is massive and no dip could be determined definitely, but at the entrance to the mine bands in the rock appeared to dip about 53° S. 30° E. The sandstone grades in places into a fine-grained conglomerate.

An intensive search for fossils in this sandstone led to the discovery of a few poorly preserved specimens of gastropods which were collected and will be submitted to Dr. Packard for determination. The markings of these fossils are indistinct and it is doubtful whether they can be identified or give any definite clue as to the age of the rock.

The mine consists of a trench 40 feet long, 5 feet wide and 25 feet deep in the fine-grained sandstone described. The trend of the ditch is $N.10^{\circ}$ E./ $S.10^{\circ}$ W. and it dips about 75° to the east. This trench has been extended at the south and for about 12 feet in a direction slightly east of south. Where the trench makes this bend a shaft 40 feet deep and 4 feet by 8 feet wide has been dug.

The trench and shaft were sunk on the "seam" which, according to Roba Brothers, was not more than about $1/8$ inch wide and contained gold in very small flakes.

The "seam" is a fracture in the sandstone and if the gold was deposited by hot ascending solutions the rock on both sides of the fracture has suffered very little alteration. Either the gold in the fracture plane originated in this way or it had its origin in the sandstone and fine-grained conglomerate and was concentrated by mechanical agencies in the "seam" close to the surface of the ground.

Samples were taken of the country rock both in the mine and from surface exposures and submitted to the laboratory at Baker.

RECOMMENDATIONS:

Advice as to the further development of this mine must be withheld pending the results of the assays.

If the sandstone and fine-grained conglomerate is the source of the gold, samples should be taken at close intervals and assayed to determine whether or not the rock may be mined profitably.

On the other hand, if the sandstone and conglomerate does not contain gold, the Roba Brothers should be advised to drift on the fracture. However, the walls of the fracture are so close together (about 1/8 inch apart) that if no encouraging results are obtained after a reasonable expenditure of time and money, it would be well for them to abandon the project.

It should be mentioned in closing that the Roba Brothers have two claims about 1/2 mile southwest of the mine, where the rocks are covered by a thick mantle of soil supporting a dense forest growth. They are located in S.18, T.16 S., R.29 E., and called the George Washington and Sulphuris claims. An outcrop of dark gray sandstone occurs in a stream channel in which there is a joint trending S.20° E./N. 20° W.

At the request of the Roba Brothers samples were taken at this point and submitted to the laboratory at Baker for assay.

Respectfully submitted:

(signed) D. K. Mackay