

R E P O R T

o n

THE H. J. JOHNSON - F. C. HAGENBY

MINING CLAIMS

CINNABAR MOUNTAIN

near

Mt. Vernon, Oregon

November, 1937

By:

D. K. Mackay

INTRODUCTION:

On October 31st, in company with Mr. F. C. Hacheney of Portland, the writer visited the claims of Messrs. H. J. Johnson and F. C. Hacheney, situated on the northwest side and near the top of Cinnabar Mountain, approximately five miles south of Mt. Vernon, Oregon.

Entrance to the property was effected by a country road which leaves the John Day Highway a short distance west of Mt. Vernon and Riley Creek, southward to the foot of Cinnabar Mountain, on its west side, after which there is a long steep climb up to the claims. Another route to the property is along a country road which leaves the John Day Highway a short distance east of Mt. Vernon and ascends part of the way up the east side of Cinnabar Mountain along Harper Creek.

The property consists of one claim, "The Viewpoint", which was recorded in Canyon City November 23, 1936, and six claims located in November and December, 1936, which have not yet been recorded. The westernmost of these contain some timber and a spring. However, the sides of Cinnabar Mountain are sparingly timbered and afford good grazing land for sheep.

A geological investigation of the reconnaissance type was made in this area and the workings examined to determine whether or not further development of the property is justified.

PHYSICAL CONDITIONS:

The Johnson-Hachensy claims are some 2500 feet above the end of the road on Riley Creek and are some 5700 feet above sea level. The northwest side of Cinnabar Mountain, on which the property is located, is a rather steep undulating slope which is covered by soil and contains relatively few outcrops. However, across Riley Creek to the west rock exposures are numerous.

The drainage from Cinnabar Mountain is northward by way of Riley Creek on the west and Harper Creek on the east.

Photographs were taken which show the topography of the area, outcrops on the claims and extent of the work done at the surface. The films were sent away to be developed and printed but have not yet been received up to the time this is being written. Upon receipt they will be forwarded to the Portland office. Reference to the photographs will give a much better understanding of the features mentioned than would be possible by pages of description.

GEOLOGIC CONDITIONS:

While few outcrops were encountered on the ascent from Riley Creek to the claims high up on Cinnabar Mountain, the rocks that compose this mountain may be best seen just west of the creek. They appear to be very fine grained basalts and interbedded sediments, the latter having been metamorphosed to argillite

and slates. These rocks are almost on edge. They strike N.55° W./S.55° E. and the dip is so nearly straight up and down it should be classed as vertical. From these outcrops and the few exposures found on and near the claims it is evident that these rocks with practically the same strike and dip underlie the cover of soil and hillside wash on Cinnabar Mountain.

On and near the Johnson-Hacheny claims some slate and outcrops of very fine-grained basaltic rock are found, having vertical dip and striking N.55° W./S.55° E. On "The Viewpoint" claim two calcite veins about 200 feet apart trend N.15° E./S.15° W. which is very roughly normal to the strike of the formation (basalts and argillites) of this area. These calcite veins fill fractures or possibly fault planes and dip 60° or more towards the west.

The west vein which also outcrops lower in elevation than the other, is about six feet wide at the point where a shaft has been sunk on it. The calcite is barren where the vein is exposed and there was no cinnabar on the dump. It should be mentioned that a short distance below this vein an open cut some seven feet wide and 25 feet dip had been made, but no cinnabar had been encountered by it.

The east vein (which outcrops higher on the mountain) contains the only known occurrence of cinnabar in the area. Cinnabar is re-

ported to have been taken from this vein between 1870 and 1900 by miners who used the mercury to extract the gold in their placer mining operations.

The vein has been uncovered for only a short distance and is about two feet wide where exposed. About 110 feet of tunnel has been dug in the general direction of the strike of the vein, but not exactly on the vein. No cinnabar was seen in this tunnel and only a small speck of the mineral was found on the dump. In view of the past history of the deposit this was both surprising and disappointing.

The tunnel showed only barren calcite disseminated in thin seams throughout the country rock and since it appeared possible that the tunnel was away from the main vein, it was surveyed by compass and pace traverse and the results plotted according to the following diagram:

From the sketch it is evident that the course of the tunnel does not exactly coincide with the strike of the vein. It is probable that the vein is not persistent along the strike but just how far it can be followed will not be known until further development work is done.

RECOMMENDATIONS:

In view of the past history of production from the vein referred to above, it is reasonable to suppose there should be a deposit of cinnabar elsewhere in the vein and there is the possibility it may prove to be of commercial value. On the other hand, the vein may grade into small barren calcite seams except for the short distance where it is exposed and has been mined, but it is doubtful that such is the case or that all the cinnabar in the vein has been mined. However, it might be difficult and expensive to locate other bodies of cinnabar in this area. The absence of this mineral in the tunnel and on the dump is discouraging and though there appears to be little chance of uncovering a deposit of importance by crosscutting and drifting on the vein, the claim should not be abandoned until that work at least is done.

Mr. Hachenev stated that there was someone in Portland willing to invest \$500 to \$1000 in further development of the property if the report by this Department seemed to warrant making the investment. He also stated that if a good showing of cinnabar were uncovered the Sun Oil Company would purchase the property for \$30,000, in

which case both partners and the investor would make a considerable profit and development of the claims would be assured. From what has been said above, it should be evident that the chances are against cinnabar being found in the crosscutting and drifting operations recommended, according to the sketch. However, the gamble is not a bad one and since a chance of success exists, the investor should be made fully aware of the odds against him, and then if he chooses to take the gamble, he alone will be to blame if the venture proves unsuccessful.

Respectfully submitted:

(signed) D. K. Mackay

HACHENEY-JOHNSON (quicksilver)

Canyon District

A
L

Owners: H. J. Johnson and F. C. Hachenev, John Day, Oregon

Location: On the northwest side and near the top of Cinnabar Mountain, approximately five miles south of Mt. Vernon, Oregon. The property is reached by a country road which leaves the John Day Highway a short distance west of Mt. Vernon and Riley Creek, southward to the foot of Cinnabar Mountain, on its west side, after which there is a long steep climb up to the claim. Another route to the property is along a country road which leaves the John Day Highway a short distance east of Mt. Vernon and ascends part of the way up the east side of Cinnabar Mountain along Harper Creek.

Area: The property consists of one claim, "The Viewpoint", which was recorded in Canyon City, November 23, 1936, and six claims located in November and December, 1936, which have not yet been recorded. The westernmost of these contain some timber and a spring.

Geologic Conditions: While few outcrops were encountered on the ascent from Riley Creek to the claims high up on Cinnabar Mountain, the rocks that compose this mountain may be best seen just west of the creek. They appear to be very fine grained basalts and interbedded sediments, the latter having been metamorphosed to argillite and slates. They strike N. 55° W., to S. 55° E., and the dip is vertical. Rocks with practically the same strike and dip underlie the cover of soil and hillside wash on Cinnabar Mountain.

The east vein (which outcrops higher on the mountain) contains the only known occurrence of cinnabar in the area. Cinnabar is reported to have been taken from this vein between 1870 and 1900 by miners who used the mercury to extract the gold in their placer mining operations.

The vein has been uncovered for only a short distance and is about two feet wide where exposed. About 110 feet of tunnel has been dug in the general direction of the strike of the vein, but not exactly on the vein. No cinnabar was seen in this tunnel and only a small speck of the mineral was found on the dump. Inactive.

Informant: D. K. McKay (10/31/37)

DEC 3 1940

STATE GEOLOGY
& MINERAL INDS.

Frank Lee Ranch
near Clarno Well
Forest, Oregon.
Nov. 19, 1937

Dear Earl:

Attached are the reports you requested over the phone, re. the following properties;

Johnson-Hachaney claims

Robt Bros. Mine

Williamson-Hatfield claims

Would like to have typewritten copies when available, for my files.

Received the attached photographs after the reports had been written. All turned out well except those (not included) showing opening to the tunnel where the ^{east} vein is exposed on the Hachaney property.

A brief description of each view will be found on the back of each photograph.

Am enclosing note from Greenwood and would like to receive the maps he mentions. The Metaker maps are being returned under separate cover.

The weather has been bad since our arrival at Clarno. It rained off and on prior to our telephone conversation and almost constantly since then. However, the following work has been done to date -

The geological reconnaissance about 10 miles in all of base traverse and a few shots on key bed.

Best regards! Sincerely yours,
Mal

REPORT on the
H. J. JOHNSON - F. C. HACHENEY
MINING CLAIMS
CINNABAR MT. near MT. VERNON,
OREGON.

by
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INTRODUCTION

On October 31, in company with Mr. F. C. Hacheney of Portland, the writer visited the claims of Messrs. H. J. Johnson and F. C. Hacheney, situated on the northwest side and near the top of Binnabar Mountain approximately 5 miles south of Mt. Vernon, Ore.

Entrance to the property was effected by a country road which leaves the John Day highway a short distance west of Mt.

Vernon and Riley Creek southward to the foot of Binnabar Mountain, on its west side, after which there is a long steep climb up to the claims. Another route to the property is along a country road which leaves the John Day highway a short distance east of Mt. Vernon and ascends part of the way up the east side of Binnabar Mountain along Harper Creek.

The property consists of one claim "The Viewpoint" which was recorded in Canyon City, November 23, 1936 and six claims located in November and December 1936, which have not yet been recorded. The westernmost of these contain some timber and a spring. However the sides of ^{Cinnabar} the mountain are sparingly timbered and afford good grazing land for sheep.

A geological investigation of the reconnaissance type was made in this area and the workings examined to determine whether or not further development of the property is justified.

PHYSICAL CONDITIONS.

The Johnson-Hackney claims are some 2500 feet above the end of the road on Riley

creek and are some 5700 feet above sea level. The northwest side of Cinnabar Mountain, on which the property is located, is a rather steep undulating slope which is covered by soil and contains relatively few ~~rock~~ outcrops. However, across Riley Creek to the west rock exposures are numerous.

The drainage from Cinnabar Mountain is northward ^{on the west} by way of Riley Creek, and Harper Creek on the east.

Photographs were taken which show the topography of the area, outcrops on the claims and extent of the ~~development~~ work done at the surface. The films were sent ^{away} ~~out~~ to be developed and printed but have not yet been received up to the time this is being written. Upon receipt they

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(5)

is ^{very} roughly normal to the strike of the formation in this area (baratts and argillites) of this area. These calcite veins fill fractures or possibly fault planes and dip 60 degrees or more towards the west.

The west vein which is also outcrops lower in elevation than the other, is about 6 feet wide at the point where a shaft has been sunk on it. The calcite is ^{where the vein is exposed} barren, and there was no cinnabar on the dump. It should be mentioned that a short distance below this vein an open cut some 7 ^{feet} wide and 25 feet dip had been made but no cinnabar had been encountered by it.

(7)

The east vein (which outcrops higher on the mountain) contains the only known occurrence of cinnabar in the area. Cinnabar is reported to have been taken from this vein between 1870 and 1900 by miners who used the mercury to extract the gold in their placer mining operations.

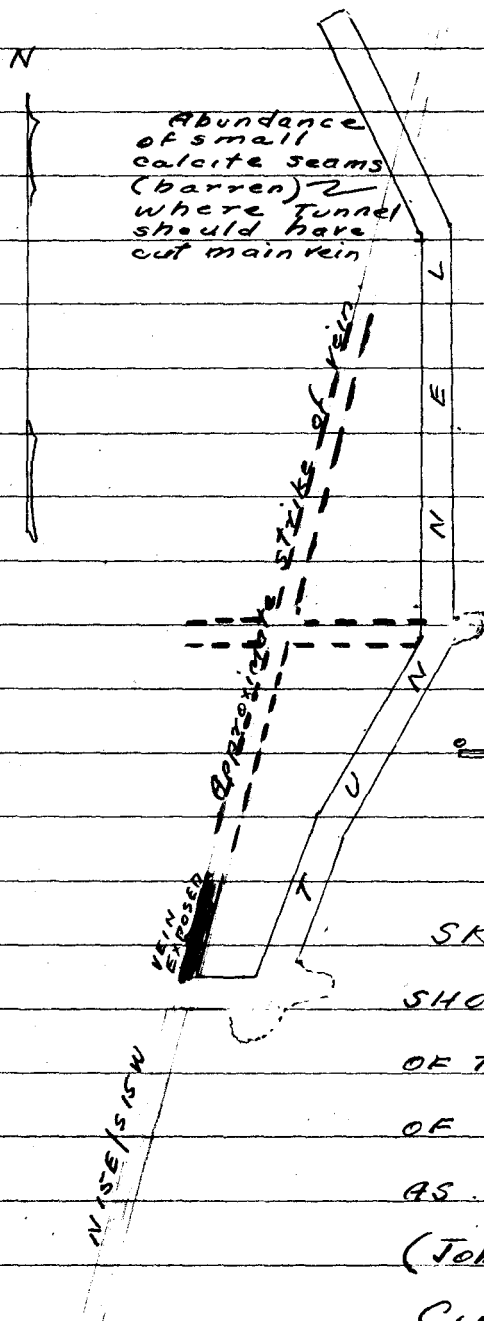
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(next page)



Notes

From entrance

Due E	5 ft
N 20 E	18 ft
N 30 E	21 ft
Due N	42 ft
N 25 W	24 ft
Total Dist.	110 ft

----- FURTHER DEVELOPMENT - RECOMMENDED.

0 5' 10' 15' 20' SCALE

SKETCH (to scale) SHOWING RELATION OF TUNNEL TO STRIKE OF VEIN, AS NEARLY AS CAN BE DETERMINED (Johnson-Hacheny claim Cinnabar Mt.)

From the sketch it is evident that the course of the tunnel does not exactly coincide with the strike of the vein. It is probable that the vein is not persistent along the strike but just how far it can be followed will not be known until further development work is done.

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end

(14)

REPORT on The
ROBA BROS. MINE,
FLAGTAIL MT,
MALHEUR NATIONAL
FOREST.

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 $\frac{3}{4}$ 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 Flaytail Mt. A sign on the road in that locality indicates the faint track-trail which leads to the mine about 1 mile distant.

On October 31st, the Robe 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 recovered encountered in recent operations.

The property was examined by the writer November 2nd. 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 Mt.

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 Rota 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 N10E/510W and it dips about 75 degrees to the east. This trench has been extended at the south end 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} ~~excavated~~.

The trench and shaft were sunk on the "seam"

~~which contained~~

which, according to Roba Brothers was not more than about $\frac{1}{8}$ 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 or 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.

(21)

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, the ~~Roba Brothers~~ should be advised to 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 $\frac{1}{8}$ 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 $\frac{1}{2}$ mile southwest of the mine, where the rocks are covered by a thick mantle of soil ~~and~~ supporting a dense forest growth.

They are located in 518 T16S R 29E and called the George Washington and Sulphurias claims. An outcrop of dark gray sandstone occurs in a stream channel in which there is a joint trending S 20 E / N 70 W.

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

(end)

REPORT on the
WILLIAMSON-HATFIELD
MINING CLAIMS

located along the Ochoco
Highway at the Crook-
Wheeler County line.

by

D.K. Mackay