

Encampment, Wyoming
July 31, 1944

Subject: COPPER claim.

Purpose: To examine the available workings on the "Buckeye" lode mining claim and, in the light of local geologic conditions, to appraise the property as a copper prospect.

Locator:(Owner): Mrs. Mart T. Christensen, 210 E. 1st Ave., Cheyenne, Wyoming.

Location: The Buckeye lode Mining claim is situated in the Sandstone Mining District in Sec. 11, T. 14 N., R. 87 W., 6th P.M., Carbon County, Wyo. Survey No. 543 made for Julia L. Stevenson. The patented ground (see report in files) of the Buckeye lode mining claim is approximately 30 miles from Encampment via the through road to Savery and Baggs. From the Gross sawmill an obscure logging road which heads up the west side of Mill Creek is followed. At the termination of this road on the divide the ridge is followed northwestward. Near the end of the ridge the workings are encountered.

Observations

The Buckeye workings were located only with great difficulty. It is possible that the prospects examined were not on the Buckeye claim. However, explicit directions as to location were given by Mr. Carl Gross and although some doubt may exist it is most probable that the workings seen are those on the Buckeye claim.

Two openings were examined. Both are badly caved and entrance could not be obtained so that surface indications are all that could be scrutinized. Caving has been so bad that it is not now possible to determine whether the openings were originally shafts, inclines or adits.

Two major rock types occur locally, one a meta-diorite or hornblende gneiss, the other a quartzite which grades into highly micaceous quartz-schist. The openings are both in quartzite into which massive quartz veins, exceeding one foot in thickness, have been injected. Mere traces of copper mineralization were observed in the vein exposures although secondary iron oxides are abundant along fracture planes in the quartz veins. In view of the limited exposures available

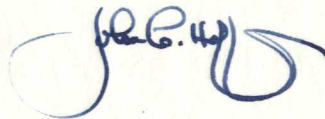
at the locality investigated no information as regards the thickness of any well-defined, existing vein, or any trustworthy dip or strike observations could be made.

Conclusions

Assuming that the workings examined were those on the Buckeye claims, as may reasonably be inferred from the fact that the explicit directions of Mr. Carl Gross were followed in detail, it may be stated that;

- 1) The extent of caving of the old workings precludes making any detailed geologic observations on the occurrence of the ore.
- 2) In general mineralization, judging from the limited data available, does not appear to be intensive locally.
- 3) The general geologic relations in the immediate vicinity do not suggest the presence of any large veins or vein systems.

Respectfully submitted,



Buckeye

October 25, 1943

Mr. James A. Marsh
U.S. Bureau of Mines
1600 East First South
Salt Lake City, Utah

Dear Mr. Marsh:

I am enclosing herewith a copy of a report on the Buckeye Copper property in the Encampment district, Wyoming. The report is by E. Prosper McCarty, at one time Professor of Mining Engineering at the University of Wyoming. The owner of the property, Mrs. Mart T. Christensen, 210 East First Avenue, Cheyenne, Wyoming, is anxious to see the property receive some attention. Mr. Christensen is Secretary of State which, you see, has some bearing on my turning the request to you.

I am most sorry that I did not have the opportunity to meet you while you were in Laramie but will look forward to making your acquaintance in the future.

Cordially yours,

Horace D. Thomas
State Geologist

HDT:lmh

1 Encl.

COPY

Denver, Colorado
September 12, 1927

Mrs. Julia L. Stevenson
Cheyenne, Wyoming

Dear Madam:

In accordance with your instructions I made a personal examination of your mineral holdings, located near Encampment, Wyoming on August 11, 1928. I find these holdings to consist of one mineral property, the Buckeye, Survey No. 543 in Section 11, T. 14 N., R. 87 W., shown in detail on the accompanying map. As indicated a patent has been issued covering the holding. The discovery point is near the south end of the property. There is a short adit driven on the vein now caved in. Some 30 feet above the adit an incline shaft, about 4' x 6' in section, 60 feet long, at about 40 degrees dip is, also, sunk in the vein. Ore has been taken out of the incline and is now on the dump at the portal.

The property is located on Mill Creek at an elevation of 9,000 feet. There is a fair road down this creek. It is some 7 miles to the main road to Battle Lake and some 18 miles further to Encampment. All except the 7 miles is exceptionally good highway. The 7 miles is a fair road.

T O P O G R A P H Y

The general character of the country is regular and not rugged. The details of the topography are shown on Maps supplied by the United States Geological Survey in Professional Paper No. 25 by Spencer, the Encampment Quadrangle, to which the reader is referred.

G E O L O G Y

The mineral outcrop is very distinct and easily traced. The country is limestone of Pre-Cambrian age, which limestone dips about 60 degrees to the North, with a nearly East and West strike. The vein cuts across this limestone dipping toward the South at a high angle. Back of and younger than the limestone is the gneiss, or eruptive rock of the Archean age. There is little surface material at the point of discovery. There is deeper surface toward the North.

M I N E R A L O G Y

The ore is a copper ore, carrying small quantities of gold and silver. Assays from samples taken by me ranged about 7% copper, \$1.00 in gold and \$1.00 in silver. This ore all came from the shallow incline shaft, though good ore was shown in the face of the vein below both of the before-mentioned workings. The gangue is an iron oxide with quartz and the ore an oxide and carbonate of copper. Within shallow depth there would be a change to iron and Sulphur sulphides. This change would occur within 30 to 40' feet from the surface. This would be due to concentration of the values at the water level, a condition common to the district. The primary copper ore of the district is chalcopyrite and the secondary ore is derived from the chalcopyrite. This secondary ore is green color and may extend down as at the Doane-Rambler mine as much as 100 feet in depth before passing to

sulphides. The Buckeye Ore is very high and dry and the water which were metamorphosed into hornblende schists. The copper in the limestone came from the schists in contact with the limestone and was introduced by water circulating thru the formation. Most of these rocks are porous and I should not expect very large deposits of ore because of the very general circulation of the water. There is, however, a very wide distribution of copper in the district and some very good deposits as the Ferris-Haggerty and the Doane-Rambler. The Ferris-Haggerty is practically on the strike of the Buckeye and about $1\frac{1}{2}$ miles East. The present topography is the result of erosion which has removed a large amount of rock which has been removed. This is another reason to expect the sulphides near the surface. In this special case with secondary concentration established there is nothing whatever to do but sink deeper to open up much richer ore and more of it.

TIMBER AND RAINFALL

There is no timber at the South end of the property. The rest is heavily timbered with Jack Pine ranging from 6" to 10" in diameter. This timber is suitable for mine timber and is worth several thousand dollars.

The snow fall is rather heavy and ranges from 4' to 8' over the surface during the winter which begins early and lasts until June. This gives plenty of water at the very surface but the ground deep down is dry. There are a few water streams about and none on the Buckeye property. There is some water in Mill Creek and springs are available.

The incline shaft should be sunk deeper as a prospecting opening and it should be kept as near as possible in the ore. This ore should be hand-sorted since it cannot be milled until the sulphides are encountered. The ore can be hauled by truck to the railroad at Encampment for market at Garfield, Utah. At present prices a sorted product could easily be made to show 30% copper which would net you approximately 38.00 per ton.

You have a very good prospect which should ultimately work into a mine and by all manner of means it should be developed.

Respectfully submitted,

E. Prosper McCarty
Consulting Mining Engineer

1050 Sherman Street
Denver, Colorado

Map

THE UNITED STATES OF AMERICA,

To all to whom these presents shall come, Greeting:

WHEREAS, In pursuance of the provisions of the Revised Statutes of the United States, Chapter Six, Title Thirty-two, and legislation supplemental thereto, there have been deposited in the General Land Office of the United States the Plat and Field Notes of Survey and the Certificate of the Registrar of the Land Office at Cheyenne, Wyoming,

accompanied by other evidence whereby it appears that Julia L. Stevenson

Has entered and paid for the Buckeye lode mining claim,

designated by the Surveyor General as Survey No. 543, embracing a portion of Section eleven in Township fourteen north of Range eighty-seven west of the Sixth Principal Meridian, in the Sandstone Mining District, unorganized, Carbon County, Wyoming,

and bounded, described, and platted as follows: Beginning at corner No. 1, a cross at exact corner and B1-543 marked on schist stone in place, from which the southeast corner to Section eleven Township fourteen north of Range eighty-seven west of the Sixth Principal Meridian, bears south seventy-six degrees fifty-nine minutes east two thousand three hundred fifty-two and five-tenths feet distant;

Thence, first course, west three hundred feet to a point from which discovery shaft bears north one hundred thirty-seven feet distant; six hundred feet to corner No. 2, a schist stone 5x14x30 inches, marked B2-543, with mound of stone;

Thence, second course, north one thousand five hundred feet to corner No. 3, a granite stone 5x10x30 inches, marked B3-543, with mound of stone;

Thence, third course, east six hundred feet to corner No. 4, a granite stone 4x8x30 inches, marked B4-543, with mound of stone;

Thence fourth course, south one thousand five hundred feet to corner. No. 1, the place of beginning; said Survey No. 543 extending one thousand five hundred feet in length along the Buckeye vein or lode; the premises herein granted, containing twenty acres and six hundred sixty-one thousandths of an acre.