1610 0007

Ralph Arnold
Hunt -- Arnold
Coll.

144

ITEM 36

REPORT

ON THE

BUCCAROO GROUP OF MINING CLAIMS

TO WHOM IT MAY CONCERN:

I, Cecil M. Hanselman, a duly authorized mining engineer and disinterested party, do hereby make and submit the following report made from a personal examination of a certain mining property known to me as the Buccaroo Group of Mining Claims, and I, the said Cecil M. Hanselman, do bind myself by these presents, to assist any interested party at any convenient time in making a joint reexamination of the above named property. And if all statements shown or made in this report cannot be reasonably corroborated in said joint examination, I hereby agree in that event to make no charges for my expenses and services while thus engaged, but shall receive a fair compensation for such service providing my work is found practically correct.

This property is situated in a mineralized zone of a range of mountains known as the Pine Forest Range and five miles from a U. S. mail box known as Dyke, Humbolt County, State of Nevada.

The district is known as the Florence Mining District, having been organized in the early nineteen hunders, but was not completed at this time, so therefore it is not on record with the United States Geological Survey and the claims are located in an unsurveyed territory.

The principal town or city of any importance is Winnemucca, a city of about 1800 population and the County Seat of Humbolt County.

The property is 80 miles in a northwesterly direction from this ciyy on a good macadamized highway. From Winnemucca the highway leads out of the city north in connection with Boise City, Idaho. You follow this for 35 miles out of Winnemucca where another highway branches off on the left and leading northwest for Denio, Oregon. Follow this highway to the Quinn River Crossing, which is a large cattle ranch and the Buccaroo Claims are located across the valley from thia point, duenwest, and 10 miles on a fair desert road.

The property is of the processionary title aad on record at the Court House in Winnemucca and consists of 12 claims plus a mill site, aggregating 250 acres in all, surveyed with corner stakes set, and very sightly.

The elevation is 7000 feet above sea level and the claims are known as the Buccaroo 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, shown in position as per map 1.

Up to the present time there has not been any real extensive development work done in this district. The development of properties near and around the Buccaroo group as observed by the writer, has been accomplished by prospectors and men of limited capital. This class of work is better known to mining men following the profession as grass root mining.

This condition can be attributed to roads, which caused the district to be overlooked by men with capital following the business.

The writer was informed by cattle ranchers, who have spent their lives in and around the property, that up to a few years ago all the roads leading into Winnemucca, which is 80 miles from the district, were nothing more than desert trails and at certain times of the year were impassable.

All of thr mining done in the various properties of the district, with the exception of the Buccaroo, has been performed for the purpose of mining only the high grade and shipping ore which was accomplished through crude methods and by hand power. Most of the ore was transported by burros for several miles and hauled by wagons to the railroad, which is 60 miles to the nearest point. From the information the writer has been able to obtain, the ore shipped from these various properties during their operation, gave an average gross yield of $70.00 per ton gold with gold at $20.67 per ounce fine.

Lying south of the group of Buccaroo claims and striking at a right angle with the stratified formation of the zome occurs a carboniferous lime dike, shown as per map 1.

The mineralized zone from this dile on south for several miles is of volcanical formation, that is the primary gneiss rock have been cut through and the entire strata has been fault with igneous rock Andesite and along the formation south of the dike are several properties, all in the early stages of development.

Going south from the Buccaroo group they are known in rotation as the Janis claims, Harness property, the Siwash group, and the Yellow Dog property. The writer looked over all of these properties to corroborate his examination of the Buccaroo group and found them all to be well defined with ore chuts of very high grade ore. They show good movement with several inches of kaolinite on both walls and show evidence of extensive plane faultings, which points conclusively to a true fissure origin of veins, and in some instances where contacts occur,are very promising.

North on this dile and on through for the entire length of this zone, the formation goes into a gneissic structure. The foot walls are of a Greisen granite and in some instances have altered to a mica schist, that is the wall shows a very distinct lamination and foliation.

The hanging walls have altered to a granitic porphyry

The granitic porphyry dikes cut through and fault the entire strata, and hence the dikes are younger than the Carboniferous rocks, and consequently the contract veins are younger than the dikes.

The slick and well defined walls of the veins traversing the Buccaroo group of claims evidence extensive plane faultings, and on both the foot and hanging walls of the veins, the ores assume a more or less banded structure. There are frequent intrusions of porphyry through the ore and several inches of kaolinite selvage on either wall.

Through this evidence and that of the plane faulting points conclusively to a true origin of fissure veins.

The mean water level is hard to determine as yet, but from general conditions is somewhere about 800 to 1000 feet, but the ores above this line are by no means free milling.

The gangue matter is principally quartz and the oxidation products are hematite, limonite, pyrolusite and wad. The undecomposed ores are made up of the minerals pyrite and some galena, but principally of the first named mineral. Of the gold and silver values the assays average about 80% gold and 20% silver, with no other metal in paying quantities.

It is the general trend of this district for the commercial values to occur in fingers or chutes, and in between these chutes the ores are very low grade, but in some instances very fine grade of milling ore is encountered. This condition can be attributed to one of a great many causes, but due to the required detailed explanation to cover these causes of the district the writer gives his reason for this particular property is due to a geological condition that afforded the least resistance to pressure, and as the arising waters were not of equal intensity, viz: in velocity, temperature and precipitating action. However these chuts occur in the Buccaroo along fault planes, also where the porphyry dikes outcrop extensively and where one rock contacts or intersects another.

There are many of these last two conditions on the Buccaroo group and the writer has located seven known chutes on the surface of this property of a very high grade of ore, arranging in lengths of 70 to 200 feet and from 300 to 800 feet apart.

The development of this property has been informed disregarding these conditions, so therefore it is still in its infancy.

DEVELOPMENT

The development work consists of open cuts, drifts, and crosscut tunnels.

The lowest tunnel is running nearly east and west, and it was the intention to crosscut the veins at depth, which would give 450 feet of backs on the Dorothy vein, shown on map 1 as vein C. No consideration as to the vital points of the property were taken when this tunnel was run and it is therefore heading into the fault zone as shown on map 3.

The tunnel is said to be 700 feet long, but at 500 feet in an air shaft was driven vertical to connect with the Dorothy stope, and in recent years has caved badly shutting off explorations beyond this point. However this can be caught up and should be done, for, as the writer has said before, this can and will be used when the proper development of the ore chutes are carried out, so as to determine their true dip and rake.

Four hundred and twenty feet in this tunnel has encountered a small vein, which is a blind vein and known as the blind vein. The operators of that time drifted both to the north and south, the drift on the south is 75 feet long and the ore is in the face, the drift on the north follows the vein for 160 feet with also ore in the face.

In place the ore is very rich, assays showing values from $50.00 up to several hundred dollars. The average width is 8" and along the north drift it has many weaves and turns and at the face the course of strike is N. 70° W. due to the fault zone and the general conditions of its walls and strike, it points conclusively to being a fracture and an off shoot of the Dorothy vein. I do not advise anything being done with this at this level.

On up the mountain and directly over the strike of the lower crosscut tunnel is the portal of the drift on the Dorothy vein shown as vein C, see map 3.

This tunnel is running south and on the vein shown through sections C and C as per maps.

Fifty feet in from the portal the vein appears and is continuous up to the fault zone, which is 250 feet in. At this point and for 60 feet the vein is all jumbled up with gangue matter, quartz, country rock, etc., and the tunnel is running with turns of all angles.

However through this fault ore is in the fact and the tunnel should have been continued on.

The greatest depth reached on the vein with this drift is 90 feet, and some very fine ore was encountered here, so I was told by the old-timers. Although this is not a known ore chute, the condition can be attributed to the fault plane which caused the minerals to concentrate to this point when in solution, and the same condition should exist on the south side of this fault plane.

Where the ore seemed to be the best and about 130 feet

in from the portal of the tunnel, a winze was sunk for 70 feet, the ore averaged in the drift about 18", but in the winze it opens up to 2½ feet, and in places 4 feet. This is the point where the 800 tons were taken from. At the bottom of this stope there has been an intermediate drift run for 60 feet in length, the vein also is broken and jumbled here, caused also by the fault plane, as this fault has a rake of 50 degrees to the north. From the bottom of this intermediate tunnel another winze has been sunk, but as it has been filled with muck the writer was unable to get into same, and cannot say what has been developed in here. I was told that this winze was about 40 feet deep and at the bottom a short intermediate drift was run about 20 feet north and connects up with the air shaft leading up from the lower crosscut tunnel, of which I spoke earlier in my report.

Forty Five feet in and from the portal of this tunnel the diagonal vein shown as vein D as per map 1 intersects the Dorothy vein.

This has a strike of N. 27° W. A drift has been run in on the vein for 47 feet and at the start of this drift the ore is only a few inches wide, but starts to widen out at about 15 feet and shows a good 18 to 20 inches of ore in the face. Something very interesting has been encountered in here, the ore carries good values and in places has produced a high grade galena and lead carbonate ores. The latter condition is a very good indication and is indicative of coming from a great depth.

1. I advise the continuance of this drift for several reasons: The ore encountered so far is of a very fine grade.ore.

2. The vein on the surface is 500 feet long, between the Dorothy and the Oklahoma veins, and due to the incline of the mountain the development would gain in backs, approximately one foot for every foot od drift run.

3. The vein intersects the Oklahoma vein, shown as vein 3 as per map 1, which has a very long known ore chute, shown as per map 6, ore chute A. In running this drift it will afford 450 feet of backs for stpping on the chute. This would be in ore all the way and should, and will, open up a very large body of ore. or approximately 23046 tons.

The Oklahoma vein, shown as per map 1 and as vein B, is one of the strong veins of the group. It is well defined and has, so far as known, three very long and promising ore chutes, shown as per map 6, ore chutes A.B. and C. There has not been any under ground work done on this vein as yet/ However it has been opened up on the surface by open cuts and is very promising for a future program.

The same condition exists on the Appex vein, shown as per map 1 and as vein A.

RECOMMENDATIONS

Before a complete development program can be accurately outlined for the lower crosscut tunnel level, the following recommendations are advisable, which are economical in cost and would afford a true survey of the known ore chutes, as to dip and rake for a future development. This program is it will be outlined will place the property on a paying basis of 50 tons per day or more in not to exceed eight months' time.

First I recommend that a drift be started on the Oklahoma vein shown as per map 1 and as vein B, and to be started 100 feet north of section through C and C as per map. This operation will require 200 feet of drift, and will afford 120 feet of backs for stoping on ore chute B shown as per map 6. Up to this point the drift can be run for a cost of $2000 and will afford approximately a tonnage of 1150 tons of good commercial ore, with a net profit of $15,875.

From this chute, the drift can be continued on and all in ore to ore chute C shown as per map 6. This will require 1000 feet of drift and will afford 400 feet of backs for stoping on this chute with a cost of $12,000 and will afford approximately tonnage of 4615 tons of commercial ore with a net profit of $59,533.

The total cost of this operation plus mining and milling will amount to $34,177 with a net profit of $41,231. These figures are based however with a reduction plant placed on the property.

Second I recommend the work as outlined on the diagonal vein shown as vein D, as per map 1, as per map 5 longitudinal section. This drift will cost approximately $8,400 and will afford a tonnage of 9230 tons with a net profit of approximately $136,665.

I recommend that the Dorothy drift be extended on for prospect purposes, also that a short crosscut tunnel be run for prospecting of two known ore chuts on the Appex vein shown as per map 1 and as vein A. This will require 150 feet of crosscut started at a point as per section shown through C and C, as per maps and drift on the vein both ways, north 300 feet, south 250 feet, this work will cost $7000. I also recommend that some prospect work be done on vein 8 shown as per map 1 as letter E. A sample taken from the outcrop of this vein gave an assay value of $40.22.

South on the property and toward the carboniferous lime dike is what was known as the Warwick mine, now part of the Buccaroo group of claims. This is a continuation of the Appex vein, and has some work done on it.

A shaft has been sunk to a depth of about 80 feet and connected up to a drift, of which is about 100 feet long. A short crosscut tunnel about 60 feet long connects this drift and is south of the shaft. At the station a winze has been sunk about 40 feet deep.

All of this work has been done at a point shown as per map 1 where the large blow out occurs and although all in ore, the values are not sufficient to pay, and the vein would not be in place at this point until a depth of several hundred feet is reached.

However south of this work occurs a geological condition that is very promising and should not be overlooked. The The Appex vein shown as per map 1 and as vein A has a strike over here of N. 50° W. amd the Oklahoma vein shown as per map 1 and as vein B has a strike of N. 30° E. The strike of these two veins are intersecting each other at a point near or at the carboniferous lime dike, of which the dike has fault at right angle the stratified formation. This condition points conclusively to a true and perfect contact, and is indicative to a very large body of high grade ore.

I recommend that a crosscut tunnel be driven to cut these veins near the dike and at 200 feet in depth, which will require 500 feet of crosscut tunnel and will cost with the aid of compressor $5000.

METALLURGY

The writer would not, until more development work was accomplished, give a complete decision of the analysis of the ore.

However as far as it has been determined the ore will amalgamate free 37% and a recovery of 95% is possible through a reduction plant equipped with concentration tables and flotation cells. I would recommend a reduction installed as cheaply as a suitable smaller unit.

A reduction plant of this capacity can be installed and housed for $16,000 with careful buying.

IMPROVEMENTS

The property has no buildings of any description on it at present, and a camp would have to be built.

A suitable camp of about three buildings, cook house and bunk house, can be erected for about $1000 and a compressor and blacksmith shop would be a small item.

An aerial tramway has been installed on the property having been built by the late Thomas Ewing. This is a very elaborate affair, and the writer would judge that it cost around $25,000 to install. It has its beginning at the portal of the lower crosscut tunnel and goes down the canyon seven-eights of a mile to a station at the mill site. It is equipped with nine 500 lb. buckets. These should be increased to twenty.

This tramway can be put into operation for a very little expense, as it only needs to be lined up, and new foundations placed under the standards. The cost of this with the

additional buckets would be $1500.

At the mill site there has been installed an Ellis type ball mille, an old type Blake crusher and an old Wilfrey concentrating table, none of which is of very much importance to the property.

There is no commercial timber of any importance on the property, but mining timbers and logging can be obtained in a range of mountains 50 miles west of the property and delovered on the property for one-third the cost of timber from local lumber companies.

ROADS

A road two miles long has been built up to the bottom of the canyon to the mill site and some 500 yards om past it. An automobile can be taken to this point. From here, and on top to the portal is a three foot trail. It is one mile long and quite steep. However this has been used to take supplies by sled and horse team.

A team can make three trips per day.

After the property proves to justify such, a road should be built so as a truck could be taken up to the mine. This can be accomplished by switch backing at the base of the mountain and then up to the ridge. This will require three miles of road and would cost $3750.

Between the mill site and the mine are numerous springs and the writer is of the opinion that if properly trenched and developed, will furnish ample water for milling purposes. However if the supply should not prove to be ample, abundant water supply can be had from wells in the flat.

The Government has recently substantiated this contention by drilling several wells for cattle.

The second water strata can be reached in not to exceed 100 feet, and will cost for drilling $3.00 per foot for a 12" hole.with casing furnished.

The distance between the site of a well of this nature and the mill site is 15,000 feet with a lift in elevation of 1800'

In conclusion I will say that while the development work on this property is very limited, I am of the opinion that with the geological conditions as they exist and the values encountered, shows the property to have considerable merit, and from the facts herein given with further exploration combined with proper financow and careful engineering, will warrant its ultimate future, and should place the property in rank with the other paying properties of the state.

Dated in Los Angeles, California, this 25th day of March, 1935.

(Signed) Cecil M. Hanselman, E. M.

Headquqrters with the Baverstock and Payne, Chemical Laboratory.

552 South Figueroa Street,
Los Angeles, California.

STATE OF OREGON)
) SS
COUNTY OF HARNEY)

I, R. M. Duncan, a Notary Public for the State of Oregon, hereby certify that the foregoing copy of Report on the Buccaroo Group of Mining Claims is a full, true and correct copy of the original thereof, prepared and signed by Cecil M. Hanselman, the original being in my possession.

Dated at Burns, Oregon, this 12th day of July, 1935.

Robt. M. Duncan
Notary Public for Oregon

Mu Commission expires July 19,1940