

0140 0022

PERSHING COUNTY - GENERAL

ITEM
52

Black Canyon area
Humboldt Co.

Sept. 30th 1902.

My Dear Friend Sinzheimer:-

I am just in receipt of your kind letter of the 25th inst. Now in regard to putting a price on my group of mines in Nevada, I would state to you that I should not like to do that, unless the Guggenheims make an agreement to the effect, that they will within a stated period of time, investigate the proposition.

I am developing property right long and I will not bind myself to anything, unless the other side will bind itself in like manner. We expect to strike a new vein of the highest grade ore within a short time, and if we do, the price of the mines will advance materially.

However, I am willing to go a great deal further with your friends than with other people of whom I know nothing. I am willing to back up the report sent to you with cash. I am willing to deposit an amount of money in the bank to cover expenses of investigation, to be paid to your friends in case they find, after investigation that the report is in any way exaggerated. Please note that the report underestimates the value to a great extent.

You understand that as I am putting into the mines, a big amount of money every month for developing purposes and as I am finding the property getting better with every day's work, I cannot put a price on the mines for any length of time.

If we strike a vein of ore, which on the surface assays over \$4000, the value of the property will run into the millions; providing it is properly equipped with machinery. There is any amount of this high grade ore floating on the surface, but as yet, we have not found the source of this particular vein.

However, in looking for this source, we uncovered another vein, which assays \$27.00 to the ton and is widening out at the bottom. We are now trying to find the source of this rich ore by cross cutting the tunnel and our expert claims that we must find it within 50 feet.

Please do not run away with the idea that this is the only rich vein we have uncovered. This last proposition is only incidental and is not even mentioned in the report. Outside of this new vein, the report sent you gives you practically a fair outline of the whole property.

I expect to go up to the mine within a few days and will probably mail you supplementary report on my return. Kindly remember, Friend Sinsheimer, that I mentioned to you in my last letter, that I cannot leave this proposition open very long. I have offers from other parties and I cannot afford to lose them altogether. I am trying my best to hold them off until you and your friends decide one way or the other. Please attend to the matter at once.

Thank you for your tip on the Pen. three and a half bonds. If it did not take four days for a letter to reach you I would ask you to buy some of that stock. I should be thankful for an occasional straight tip by wire at my expense. With best regards and good luck to us all I remain

Yours Sincerely,

REPORT ON MINES AT BLACK CANYON, HUMBOLDT CO., NEV.

This property consists of four adjoining claims, each 600 by 1500 feet, and known as the "Great West," the "Auld Lang Syne," the "Dawn," and the "Great West No. 2;" and their relative location is shown by the accompanying plat.

They are situated seven miles southeast of Humboldt station on the Central Pacific Railroad in Humboldt County, Nevada. A good wagon road leads to within about 3/4 of a mile of the mines, from which point a trail leads to the camp.

TOPOGRAPHY.

The claims are located on the high and rugged mountain which rises abruptly from the level country adjoining the Humboldt River, and at an elevation of about 3,000 feet above the river. The mountain side is seamed with deep precipitous canyons that are formed partly by erosion and partly by disturbances of the earth's surface at some period when the present geological formation was created. These canyons are numerous, and are separated by high dikes, or cliffs, which rise perpendicularly from the bottoms of the canyons to a height, in some instances, approximately 1,000 feet. These dikes or cliffs are composed almost entirely of quartzite, and in many instances the canyons are formed by the erosion of a metamorphic slate, and sometimes limestone, which offers less resistance to the action of the elements than does the quartzite.

The claims are situated near the head of one of the deep canyons known as "Black Canyon," and at a point where the canyon widens, forming a large depression, or basin, having an incline of about 30 degrees.

Above this basin towers the summit of the mountain at an additional elevation of over 5,000 feet.

WATER.

Black Canyon, at the mine, affords a constant supply of water, clear, cold, sufficient quantity being available for domestic purposes, and there is no difficulty in getting water for mining purposes.

mill, and the application of steam or other power would be necessary.

The quantity of water could be doubled by conveying the water from Antelope Canyon, which lies about a mile south of Black Canyon, and runs parallel with it.

TIMBER AND FUEL.

There is no timber of any consequence near the mine. Wood for fuel for domestic purposes can easily be obtained near by, but timber for other purposes would have to be transported from the railroad.

Coal for manufacturing steam can be had at the station for \$6.00 a ton or less. Electric power could be generated at the river, by water, or by steam, at the railroad, and transmitted.

GEOLOGY.

At the base of the mountain, and about one and one-half miles from the mine, to the west thereof, a wide belt of slate runs nearly due north and south; adjoining this slate on the east is a stratum of crystallized slaty limestone about one-half mile in width, running parallel with the slate, and traceable for a distance of many miles. Joining the limestone on the east is another stratum of slate of considerable width. Lying next to this body of slate is a belt of quartzite which extends from Antelope Canyon on the south and beyond Humboldt Canyon on the north, a distance of more than four miles in length. Where the quartzite is crossed by Black Canyon, it has a general width of perhaps one and one-half miles, when it again forms a contact with slate and limestone on the east, and this continues to the summit of the mountain.

The quartzite zone is broken at intervals by intrusions and belts of metamorphic slate and other independent formations.

The claims lie in this quartzite zone at a point where there are several intrusions of clay, slate, and igneous rock.

VEIN FORMATIONS.

Within the boundaries of the claims are quartz vein intrusions mentioned in this report. These comprise two separate veins of quartz, and probably date to different periods. The veins are numerous, and occur in quartzite, slate, and limestone.

attaining in some instances a width of 150 feet, having a strike obliquely across the quartzite formation almost due northeast and southwest.

The strike of the other formation is almost due east and west, and cuts the quartzite formation at right angles.

These quartz bodies have a distinct cleavage and are clearly separated from the country rock. The developments that have been made demonstrate that the quartz bodies have smooth well-defined walls and are not to any extent "frozen" to the country rock. Their characteristics clearly indicate that they are fissures, and in all cases the veins have increased in size and symmetry with depth, where the development has been made.

One of the peculiarities of the veins is that they cross the depression or canyons, cliffs or intermediate formations, cropping for long distances on the surface. In some cases where the veins enter the cliffs, they extend perpendicularly from the base to the summit, passing through the dike, and again appearing on the opposite side of the next canyon. This condition exposes to view millions of tons of quartz, any piece of which will give a return of gold in the assay. The values of various samples will be given in a subsequent part of this statement.

MINERALIZATION.

The country rock is charged with iron. In the limestone it exists in the form of sulphide, but in the quartzite the iron is oxidized, and stains the rock a rusty brown color.

The veins contain iron, lead, zinc and copper sulphides, accompanied with "free" gold. The veins are essentially gold-bearing veins, containing only a small percentage of silver, one of the peculiar characteristics being "free" gold accompanying the galena, in many instances appearing in the sulphide, thus making the galena exceedingly rich in gold. The gold is not in all cases "free", as the assays indicate that the greater value is found in carbonates of lead and copper, also accompanying the "free" gold.

In early times the country was prospected and worked solely with the view of obtaining silver. There being very little silver in any of the veins on this ground, they were abandoned and ignored. It will be noted in the "Geological Survey of California", published

for silver alone. But in recent years prospectors have begun searching for gold, with the result that all over the state gold mines are being developed and worked with excellent results, and it is probable that Nevada will yield very much more gold in values than it ever did in silver values.

six miles south of Black Canyon is the "Old Eye Patch Mine" which is said to have yielded \$17,000,000 in silver. Six miles southeast is the famous "Arizona Mine", which has been worked from the earliest period, and still has large quantities of silver ore in sight. Ten miles east is the old camp of "Unionville," which is still an active prosperous mining locality, and has yielded and still yields good returns to miners. Through all of the region of the north are mines that are being worked for silver on a limited scale. Many of them have been extensively developed, but owing to a depreciation in the value of silver, they have suspended operation, except on a small scale.

Within the last year numerous discoveries have been made in the surrounding country, and it is evident that the Goldfield, like other camps in Nevada, will be extensively explored for gold.

WORKING CHARACTERISTICS.

The veins are hard and firm, and the country rock is of such a character that no timbering is necessary in either shafts or tunnels.

There is no soft ground apparent, and no "decomposed" vein matter.

A tunnel could be started at the points marked "2" "3" or "4" on the map, and could be extended to the point marked "6" with a total length of about 1400 feet, and would attain a depth of over 1000 feet below the surface. Such a tunnel would probably be in quartz all of the way, if so desired.

DEVELOPMENT AND VALUES.

The underground workings are as follows:

In the Great Vein, at the point marked "1" on the plan, a vein of gold and silver is a foot in width, and from this vein a small amount of gold and silver is taken.

exposing a continuous vein, averaging 16 inches in width. A "winze" or incline has been sunk in the east drift 28 feet deeper, in ore. The vein shows strong and well formed.

Mr. J. C. Pierson has made many assays and he estimates the average value of the ore at \$96 per ton. I had only two assays made. One of a selected piece of ore weighing perhaps 20 pounds, and it carried \$616. per ton. I selected pieces of the whitest quartz that I could find on the dump, carefully avoiding anything that had the appearance of value, and it carried \$3.28 per ton. The best ore was sacked when taken out, and the dump which contains about 100 tons does not correctly show the value of the vein. The vein at this point carries very rich sulphurets of lead and iron, besides free gold in material quantities. The concentrates will average over \$1,000 per ton after amalgamation.

At the point marked "2" is a vein entering the cliff. At the top it is only a few inches wide, and at the base it is 6 feet wide. A small cut has been run into the vein perhaps eight feet. Two assays of samples of the whole vein gave \$6.12 and \$1.97 respectively.

At "3" an excavation is made upon a vein at least 12 feet wide, and to a depth of ten feet. Some of the ore shows free gold. A sample clipped from the face of the excavation showed no value sufficient to pay.

At "4" a cut has been run into a large vein about 20 feet and a hole sunk at the end below the bottom. At this point a surface sample assayed \$109. Other assays from the excavation showed \$18, \$11.40, and \$1.37, and two assays gave only a "trace". None of these were taken with a view to high assays, but were taken in the usual manner of sampling. A sample chipped from the cliff 50 feet east from the excavation, assayed \$3.20.

At "5" a ledge 150 feet wide runs into the cliff, having a perpendicular height of 100 feet. A sample chipped at random from the face of the cliff assayed \$2.40. I did not examine close enough to ascertain if there were portions of the ledge that were of better quality, although on the north side I found a small lode in showing the point, most of which was within the ledge.

At "6" which is a continuation of the ledge at "5" the vein appears to be 200 feet wide of quartz and quartzite. I chipped a sample from the surface across about fifteen feet of the vein, and it assayed \$5.28.

At "7" a tunnel is being run to undercut the croppings of quartz carrying carbonate of copper and lead, with considerable free gold. The croppings indicate a vein two feet in width. To reach this, required a tunnel 150 feet long. It follows a small vein of ore which at the beginning assayed \$3.44, but at the face of the tunnel the ore is much better, showing galena and free gold. At 112 feet the vein was 6 inches at top and 12 inches at bottom, and assayed \$5.67. At 120 feet the vein was 8 inches at top and 14 inches at bottom and assayed \$23.91.

The carbonate croppings from assays, which were the only ones made, showed \$44, 57.99, \$112.68, \$113, and \$4,445 respectively.

At "8" is a vein averaging a foot in width. From this place many specimens of free gold have been taken. But little work has been done, but the ore on the surface appears to be of a high grade carrying coarse gold.

At "9" a vein of rose quartz enters the cliff. The vein is 18 inches wide, shows free gold and sulphurets, but no effort has been made to ascertain its value.

There are many other places where free gold can be found in the veins, and there are numerous veins not mentioned. No development has been done on them, and no effort to determine their value.

None of the assays above mentioned were taken with a view to large returns. There would be no difficulty in selecting pieces at crop-points which would assay hundreds of dollars to the ton, but they would give no indication of the true value of the ore bodies. In fact, while the work was being done at "2" "3" and "5" Mr. Piereson, who was in charge, and who is a capable assayer, assayed pieces of the ore which showed exceedingly high values.

Another tunnel has been started to tap the great West vein "L" at an additional depth of 30 feet. It is now in 130 feet, and will have to be extended 100 feet more to reach the vein.

Yours,

John C. Smith, Esq., M. D., Mineral Location

upon each, and full compliance with the law.

CONCLUSIONS.

Opinions based upon probabilities are not of much value. A few observations may, however, be of interest.

In the first place, every statement made herein can be verified, and I have carefully avoided any "coloring".

It must appear from the foregoing that this property is good ground for prospecting and development. To an experienced miner it is apparent that at several points there is ore of sufficient quantity and value to pay excellent returns over the cost of reduction. This is particularly true of some of the smaller veins.

Whether the larger bodies of quartz will pay is not so easy of solution, for the reason that there is no sufficient development to demonstrate their average value. It seems probable, however, that large portions of such bodies are of a grade sufficient to justify development, and prospecting with fair expectation of profit.

I can safely say that ore in a ~~large~~ vein can be extracted and reduced at a cost of \$3 per ton by the expenditure of a sufficient sum of money to provide proper facilities for working. The assays indicate an average value in the large bodies of ore in excess of that cost.

In the smaller veins the cost would not reasonably exceed \$10 per ton, which would leave a large margin of profit.

From all indications this property presents an unusually good opportunity for the creation of extensive and valuable mines, and with careful, business-like management ought to pay for the investment necessary to develop and work the veins.