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THE PROCUNIER GOLD MINE

LOCATION

The Procunier Lode Mining Claim is located in the Hawkeye Mining District Gilpin County, Colorado, 6 miles northwest of Black hawk and about one mile south from Perigo Mine and Mill, and in the town known as Wide Awake. It consists of one full claim, patented, 150 X 1500 feet.

GEOLOGY

The general country is composed of typical Gilpin County metamorphic granite, which has produced so many veins of gold bearing quartz and porphyry.

IMPROVEMENTS

The property has a good shaft house over the main shaft 20 X 50 feet and is equipped with a 25 H. P. flange steel boiler, mounted in stone housings, and a 15 H.P. friction hoister with all connections and fittings complete.

WORKINGS IN DETAIL

The main shaft is located 600 feet from the lower end of the claim. This shaft is 119 ft. in deep. At the depth of 38 feet 6 in. from the tip of the shaft is the first level; this level has been driven from the surface following the vein and is 627 ft. in length. At the mouth of this drift on the surface the vein was decomposed. Near the shaft the sulphides began to appear and from that point to the breast of the adit there are large bodies of sulphide ore which have a value of from \$6.00 to \$11.00 per ton which can be concentrated, 4 tons into 1, at a cost not to exceed \$1.00 per ton. These bodies of ore are opened ready for stoning, 2 men have kept the 20 stamp mill at Wide Awake supplied with ore to its full capacity by working in the stopes in this level. Very little ore has been stoped out; all the work done on the property has been in the nature of development work. For a distance of 112 feet the breast of the adit back there is a

continuous streak of solid ore ranging from 6 to 12 inches in thickness, a sample of the whole streak, taken all the way along, gave a value of \$31.00 in gold.

At the breast of the drift this ore is now 8 inches in thickness and widening. At the point 85 feet below the top of the shaft is the 2nd level. This level has been worked more toward the east; no stoping has been done on the west. The west drift is 75 feet in length, and shows ore all the way along of a shipping grade. Accompanying these streaks of shipping ore are large bodies of concentrating ore, which have a value of from \$6.00 to \$11.00 per ton. At the end of the drift a cross cut was made to the south end and no wall found. The vein matter in this level is over 15 feet width and is all good milling ore. The vein here is oxidized ore; east of the shaft on this level good free milling ore is found in the stope. 112 feet below the top of the shaft is the third level. The work done on this level is confined to a small drift 26 feet to the west, and a very small stope in the drift. At this level a good body of ore is exposed 20 inches in width, the value of which is \$40 per ton. The ore widens materially as depth is gained and increases in value.

Estimate of Ore

By calculation, I estimate there are blocked out about 9,000 tons of ore which will average \$9.00 per ton, or a gross value of \$81,000.

Treatment and extraction

The ore being soft and in large bodies admits to of easy and cheap extraction. This has been demonstrated by the fact mentioned, of two men keeping the 20 stamp mill busy. It is safe to calculate the cost at \$1.00 per ton for mining, estimated on the following basis;

Each 100 feet of drift driven on a fifty foot lift would block about 3000 tons of ore. This can be driven for \$5.00 per foot, or \$500 for the 100 feet, or not to exceed 16 cents per ton. Calculating that one man can break 5 tons per shift, which is much less than has been done in actual practice, the cost would be 50 cents per ton, based on \$2.50 per day as wages. Adding 50 percent for hoisting, pumping, management, etc. based on an output of 50 tons per day makes a total of 90 cents per ton. In the matter of the treatment of the ore,

85% to 95% of this ore can easily be saved by amalgamation and concentration. By this method, based on the production of 50 tons per day, the milling expense would be about as follows:

Mill man	\$6.50
Assistant	4.00
2 firemen at 2.00	4.00
2 laborers at 2.00	4.00
2 tons of coal at	
\$5.00	10.00
oil, light,	
<u>repairs, etc</u>	<u>7.00</u>
Total	\$35.50

This would make the milling about 70 cents per ton. Based on these calculations, the ore could be mined, milled and marketed as follows:

Mining 50 tons of ore at \$1.00 per ton	\$50.00
Milling 50 tons of ore at 70 cents per ton	35.00

	\$85.00
Gross value of 50 tons of ore at \$9.00	450.00
Loss of 20% in treatment of 50 tons	90.00
Difference	360.00
Expenses of mining and milling	85.00

Profit on 50 tons of ore	\$275.00

This gives a profit of \$5.50 a ton at a saving of only 80% of the values. Based on this estimate, there are now blocked out in the mine \$49,500.00 worth of ore, net. In the above estimated only the milling ore is included. It is safe to say 5% of the ore extracted would be smelting ore at a conservative value of \$35.00 per ton, or 2 ½ tons for every 50 tons. At \$35.00 per ton the net value of this ore would be \$22.00 or \$55.00 for the 2 ½ tons each day, estimating a 50 ton production.

At a distance of 480 feet from the main shaft and toward the upper end of the claim, is a shaft about 35 feet deep. From this shaft a drift has been run about 50 feet in length. From this there has been taken considerable ore, running from \$8.00 to \$12.00 per ton.

Water

While examining the property, I made some careful observations as to the amount of water that would have to be taken care of, and as closely as I could calculate, it was about 30 gallons per minute. This could be handled by a pump at a small expense.

Fuel

Wood can be contracted for \$3.00 per cord, but as coal can be laid down on the ground for not to exceed \$5.00 per ton, it would probably be the most economical fuel.

Timbers

Those can be obtained at from 8 cents to 10 cents per inch, counting the diameter of the small end of the 16 foot stick.

Conclusions

In conclusion, this property is one of those which have been worked during the time when high treatment charges, freight and marketing were almost prohibitory to success, and when the methods of treatment were crude and expensive in comparison with what they are today. With the expenditure of a small amount of money on the property, and the proper machinery for treatment, the mine would pay handsomely. The property is fully developed into a mine. There is enough ore opened up to prove it to be a producer, but would suggest that about \$2500.00 be expended in the following manner.

First sink the shaft to a sufficient depth to allow 50 ft. lift or about 20 ft. further. Sink an additional 6 ft. for the purpose of a sump to collect the water. From this depth drive levels off on each side of the shaft and block out ore as rapidly as possible. Supposing that the shaft is sunk an additional 30 feet beyond its present depth. This can be constructed for \$12.00 per foot or \$360.00 for the entire amount.

If the level thus opened is driven 100 feet each way on the vein and the present 2nd level extends 100 feet. There would be exposed about 26,000 tons of ore. This 300 ft. of drifting could be contracted for not to exceed \$5.00 per foot or \$1500.00 for the 300 ft. This would leave \$640.00 of the \$2,500.00 suggested to put the shaft in shape and do what extra work that might come up. When this is expended the property will be in shape for the production of 50 tons daily.

I recommend this property as a good proposition for investment to anyone wishing to purchase a good gold property.

Yours Truly,
(Signed) J. S.

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