

Tom Sheets
July 25/89

MICHAEL P. GROSS
Mining Consultant
P.O. Box 250
Kingston, Idaho 83839
Ph. (208) 682-4374
Ph. (604) 357-9343

887462

May 24, 1989

Following is a brief history of the Sheep Creek gold camp along with my assessment of potential, possibilities and problems.

The Sheep Creek gold camp is located in southern British Columbia about 15 miles north of the United States border. Gold was first discovered in the late 1880's and mining began about 1898. Intermittent mining has continued to the present. The camp ranks 7th in production in British Columbia with more than 750,000 ounces of gold produced.

Mining activity was minimal from 1950 to 1980. Production from lessor operations was shipped direct to Cominco's smelter at Trail because the ore can also be used as fluxing material.

Gold ore occurs in narrow, fissure type veins filled with white quartz. Gold is found as microscopic particles within the vein quartz. Historically, the best grades of ore have been from veins less than two feet wide. The average grade of ore recovered from the district is .42 oz Au per ton. However, that grade includes early day production from stamp mills where recovery seldom exceeded 65% and many times was only 50%. In the 1930's, five different cyanide vat leach mills processed over one million tons of ore and recovered 97% to 98% of the contained gold.

The camp is somewhat more than a mile wide by five miles long, with about 30 different veins having some level of commercial production. Gunsteel Resources Inc. (my client) has successfully negotiated agreements that will unitize 85% of the camp. With unitization, a comprehensive exploration, development and mining plan can be implemented that will make mine operations much more efficient and therefore, more cost effective. Operating costs should stabilize in the \$75 per ton range.

Exploration beginning in the late 70's and continuing up to the present has successfully developed over 100,000 tons of proven and probable ore reserves averaging about .35 oz Au per ton. This exploration work was conducted by several different companies and to the best of my knowledge was not done with the idea of unitizing the district. However, Gunsteel's efforts to unitize the district has given me access to information from other properties that has helped convince me the area still has many years of production at 300 tons per day.

Successful exploration in adjoining properties has also helped convince me that substantial new ore reserves can be developed if the camp is unitized. One vein, considered to be mined out by the old timers, had over 40,000 tons of proven, probable and possible reserves developed in the early 1980's. The ore

grade is calculated at .38 ounces Au per ton.

Underground tours in these properties resulted in the conceptual development of a new mining method for the camp. I call the method sub-level longhole stoping. I've discussed the method with numerous mining men and explosives representatives and they also believe that the method will work. Successful implementation of the method will reduce dilution and enable more efficient mining, both of which will reduce costs. However, reducing dilution will be more important because a higher grade product will be mined, which will reduce the cost per ounce produced.

In evaluating the profit potential, I used \$437 per ounce Canadian. This equates to \$350 per ounce U. S., which I believe is a good long term price projection. At .35 ounces Au per ton mined, the ore value is \$153.00 per ton. Operating costs of \$90.00 per ton mined and milled mean that operating profits are \$63.00 per ton. The \$90.00 per ton cost does not include capital investment. At \$90.00 per ton operating cost, the cost per ounce produced is \$257.00. At \$75.00 per ton, the cost per ounce produced is \$214.00. Both cost per ounce figures are in Canadian dollars.

I believe that .35 ounces Au per ton is a reasonable yet conservative estimate of the expected ore grade that will be mined because long hole stoping will reduce dilution when compared to the current method. Therefore, any improvement in grade as a result of reducing dilution will go right to the profit column.

The main risk that I see with this operation is one of ore reserves. The nature of the ore bodies is such that it will be difficult to ever have more than three or four years reserves in sight at any one time. However, many mines have mined for 20 years and more with only three years of reserves. Therefore, if one is comfortable with a limited amount of defined reserves and is able to recognize that additional reserves will continue to be developed as needed, then the operation makes sense. The other risk is a falling gold price and I believe that has been addressed by using a long term average price of \$350 per ounce U. S. for economic analysis. At a 20% exchange rate, a cost per ounce produced of \$250 Canadian equates to \$200 U.S.

This letter is too short to do justice to the camp, its potential, or the potential of the total package Gunsteel has assembled. However, if you or someone else you know is interested in learning more about the property for investment purposes, I'd be delighted to furnish additional information or preferably, arrange an on site tour. If you have any questions don't hesitate to call.

Sincerely yours,

Michael P. Gross
Manager, Gunsteel Resources Inc.