

Hume Hotel,
Nelson, B. C.

- almost certainly
from Stuart.

February 15, 1930.

Mr. Frank Eichelberger,
Field, B. C.

Re: J & L Mine.
Revelstoke, B. C.

Dear Eichelberger:-

I am enclosing herewith all my data on the J. & L. Mine above Revelstoke; since I have no duplicates of most of it, I would request that you return it to me when you are through with it.

In the following letter I give you my ideas as to what should be done at the property to put it in condition for sale, and the approximate cost. The cost estimates are naturally preliminary and inaccurate, but I am inclined to think they are liberal. I should like to hear from you in regard to any items in which you disagree with me.

Accessibility:

At present the road from Revelstoke to the mouth of Carnes Creek, as distance of 27 miles, is in fair condition but will shortly undergo improvement and form part of the trunk highway to Golden. From the mouth of Carnes Creek to the mine, a distance of nine miles, there is a trail which is mostly fair, but a mile or more is bad and needs rebuilding. I believe it could be put in good condition for about \$2000.

For a road two routes should be considered; one of them essentially following the present trail, and the other following up on the opposite side of the creek.

The route along the trail is on a southern exposure but is crossed by several snowslides; the grades would be good but possibly undulating. The road on the other side would be on a north exposure, through heavy timber, but free from slides. I have not been over its course.

For a road along the trail, I would judge the cost would be about -

4 miles of easy work	\$2000 per mile
4 miles of medium work	5000 "
1 mile of heavy work and rock	10000 "
Total	\$38,000

It is probable that one half of this cost would be paid by the Provincial Government.

An auto road to the mine, while doubtfully justified at present, would be of very great assistance

to operation and to the sale of the mine.

Camp:

Claims should be located to cover the proposed camp site, and the claims covering the vein should be Crown Granted.

The only building now on the property is a poor trapper's cabin. Before any important work is done a good boarding house and bunk house is required, and should be of sufficient size to handle twenty men. Under the conditions it probably had best be built of logs, at a cost when fully equipped of perhaps \$5000.

Power and Mine equipment:

It will be advisable to use power drills for development but whether gasoline or waterpower will be best can only be determined by a further study of conditions.

Waterpower is available but may be expensive to install and may give trouble in the winter, while gasoline will be expensive to haul.

The cost of complete power and mine equipment would I should judge, cost between \$10,000 and \$20,000 depending on what is decided upon as best.

Development:

I would recommend development more or less as indicated on the accompanying map, viz.-

Upper J & L tunnel, drift	500 Ft.
" " " , raise to bottom Annie M shaft	350 ft.
" " " , raise to surface at intermed pt	250 Ft
Lower J & L tunnel, pick up vein and drift	650 Ft
" " " , raise to upper tunnel	250 Ft
	<u>2000 Ft.</u>

This program would be varied somewhat according to the results obtained, and might well be accompanied by deep open cutting or shallow tunneling at various favorable points on the outcrop.

I would provisionally estimate the cost of the above work at \$20 per foot, which should cover all costs.

If it be assumed, simply to show the possibilities, that all the above work will be in ore averaging 2½ feet wide, there will then be blocked out 75,000 tons.

Ore Treatment:

I consider the question of ore treatment the most important of any at the present time. It should be proven that the ore can be treated at a reasonable cost and good results before any great expenditure is made on equipment or development.

I would advise that tests be made first on the ore now exposed, since there is a very large tonnage indicated of sulphide ore which is mixed to a greater or less extent with oxidised ore. If it be found necessary to obtain fresher ore for the tests, I would suggest contracting a limited footage of development, the contractor to work by hand and furnish everything. The cost of this might be \$20 per foot or slightly more.

Finance Requirements:-

For the preliminary treatment tests, including a small amount of development work, \$5000 to \$10,000 should be ample; further work would be dependent on the results.

If the average ore shown by the present assays will show an operating profit on conservative estimates after the treatment has been worked out, more elaborate equipment and development should be undertaken.

The estimated financial requirements total as follows:-

Preliminary tests, development, etc	\$10,000
Road	20,000
Camp	5,000
Power and mine equipment	15,000
Mine development	40,000
Total	<u>\$90,000</u>

General Notes:

The difference in the average assays between the samples of McLoughlin, Hearn, and Starr is almost entirely in the gold, which leads one to suspect that the assaying and not the sampling is to blame. The samples of Hearn and Starr were assayed by different men; I do not know who assayed the McLoughlin samples.

The average ore now exposed and indicated is of a grade which should show a profit under good treatment results, but will not allow extravagance in management.

I believe that the cost estimates given above should prove to be liberal.

If there is any further information or opinion that I can give you, please advise me.

Yours very truly,