Dear Sirs:-

The following report upon your property in Clear Creek County, Colorado, is based upon an acquaintance therewith beginning in 1881, at which time I made preliminary location surveys; again in 1884, when the property was surveyed and examined by myself, officially, for United States patent; another special examination in November, 1891, and again during the present week.

The property is situated near the head of Fall River, and embraces what is known as Silver Creek and adjacent territory, comprising in an irregular shape, a tract of ground about two and one-half miles north and south, by one and one-half miles east and west. The claims, in detail, are known as follows:

<table>
<thead>
<tr>
<th>SURVEY NO.</th>
<th>Placer, containing</th>
<th>ACRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1356</td>
<td>R.O. Phillips,</td>
<td>114.10</td>
</tr>
<tr>
<td>1426</td>
<td>G.R. Harris</td>
<td>150.38</td>
</tr>
<tr>
<td>2070</td>
<td>Nebraska,</td>
<td>124.19</td>
</tr>
<tr>
<td>2080</td>
<td>Lincoln,</td>
<td>152.84</td>
</tr>
<tr>
<td>2081</td>
<td>Texas,</td>
<td>150.92</td>
</tr>
<tr>
<td>2082</td>
<td>Rockwood No. 2</td>
<td>145.88</td>
</tr>
<tr>
<td>2102</td>
<td>E.L. Trickey</td>
<td>143.45</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>981.76</td>
</tr>
</tbody>
</table>

The amount of land allowed to each lode mining claim being 5.17 acres, the above acreage is equivalent to 190 lode claims.

The claims are all patented or entered for patent. The land having been pre-empted and patented under the head of placer claims, it may be well to state what such a grant conveys. A placer claim, speaking in general terms, conveys everything within its boundaries to the centre of the earth, including all veins, lodes or ledges discovered within the placer subsequent to the entry for patent.

The only reservation in a placer is in case of a well known and well defined vein which was opened up and known to exist prior to entry.

A placer patent, then, once granted, has all the privileges of a lode patent, and, in fact, some superior advantages, as it shuts out the complications arising from the uncertain law concerning "ross lodes," and enables the ground to be taken up in a more compact shape than can be acquired by a lode claim.

It has been positively proven and decided that the deposit, hereafter described, which constitutes the main work on the property, was not a known vein or lode at the time of the placer entry, and consequently was taken up as required by law, as a placer claim, the result of which is that any veins or lodes which may be hereafter disclosed within the territory patented, carry a clear title with them under the placer patent.
I have gone into this matter, perhaps, rather too lengthly, but have done so for the reason that the territory, comprising nearly 1000 acres, is such an extensive one, covering, possibly, more ground than is owned by any other company in the county, that an outsider might question the right and justice of one party taking up such an extent of territory.

The original patentees, however, were the first upon the ground, had faith in its value, and were entitled to whatever amount they saw fit to occupy and purchase, and have now an unquestioned title to the land and whatever is in it.

A large part of the property is, strictly speaking, of a placer character—that is to say, the ground embraces a large flat basin; also two and one-half miles of Silver Creek and the bottom land adjacent thereto, and over one-half mile along Fall River, throughout all of which bed-creek is covered with a wash deposit from the neighboring mountain sides, and so situated that such accumulation has been going on for ages, and undoubtedly contains a large amount of gold, and in fact, has been so proven by numerous tests through sluicing, sinking pits, etc. I think the prospects are very favorable and encouraging for success in operating, under a systematic plan of placer works, the bottom land bordering upon Silver Creek, and that this feature itself deserves a great deal of consideration in estimating the value of the property. The adjacent hillsides abound in valuable gold lodes, the surface washings of which must have accumulated in the lowlands below. An abundance of water is close at hand, in Silver Creek. A good grade is available for disposing of tailings and debris, and a ditch, one mile in length, has already been constructed, by means of which several hundred feet head of water is available at the point where placer operations would naturally be started.

Two other ditches, one 7000 feet in length, taking water from Fall Creek, and the other 8000 feet heading in Fall River, constructed at a cost of over $10,000, conduct water on to the western portion of the property, and provide ample water rights for placer or milling operations, and owing to the rapid fall of the ground in an easterly direction from the point where the ditches enter the property, secures, I should judge, over 500 feet vertical head of water, which can be readily utilized for generating power in working either mining or milling operations.

The claims also embrace over 100 acres of good timber land, furnishing an abundance of heavy, live timber, and, in addition, a large amount of dead timber available for fuel, and sound enough, in most cases, for mine timbers.

The property is readily accessible, by good wagon road, from either Central City, nine miles distant, or from Idaho Springs, about eleven miles, both railroad towns containing about 2500 inhabitants each.

Fall River Valley, I should judge, would make a feasible railroad grade to direct connection with Union Pacific railroad, a bene-
fit which can be hoped for when mining production in this vicinity shall warrant.

The foregoing description will, I think, convey a general idea of the character and location of the property, and I shall confine the balance of my statements to that portion of the ground which has been developed and in which the immediate and available value lies.

The only claim that has received any development is the G.B. Harris Placer.

This was first worked in 1881 by hydraulic placer methods, using water from the ditches heretofore referred to, for operating the "Little Giant." The ground was easily broken down by the heavy water power thus utilized, and run through sluice boxes for catching the gold, the results of which I have no means of knowing.

The practical result, however, was the uncovering and disclosing of a large mineralized deposit, the existence of which had never been imagined, the placer operations having been undertaken only with the expectation of working the loose deposit and gravel overlying bed-rock.

The placer washing was continued from time to time until it resulted in laying bare an area of ground over 1000 feet in length, and from 200 to 400 feet in width, rising quite rapidly in a westerly direction.

Near the extreme west end of this excavation a large pit has been sunk from the surface, in the nature of a stone quarry, forty feet in depth, and seventy-five feet in diameter.

From the east side of pit at the bottom, an incline tunnel leads in an easterly direction a distance of 340 feet to a twenty-seven stamp mill 50 x 30 feet in size, constructed of logs.

From the south side of the pit a tunnel 4 x 6 feet runs southwesterly 103 feet, forty to fifty feet below surface. From the west side directly opposite the first mentioned tunnel is found another extending westerly about seventy feet, the end of which would be over fifty feet below the surface.

Above the latter tunnel at the surface has been run a fourth one, eighty feet westerly, starting at a point about thirty-five feet from the edge of the pit. In the bottom of the pit a shaft has been sunk about forty feet in depth.

From the point marked "A" in the incline tunnel, about sixty feet from edge of pit, extending westerly, the incline, pit and tunnels all show ore of a practically similar character throughout, or, in other words, an ore body is exposed, by developments underground, 270 feet east and west by 170 feet north and south, and the limit not yet reached, either in a north, south or west direction. An examination of the rock near the surface, where the top soil has been washed away, would, moreover, indicate a north and south width of over 300 feet at least, so that the 170 feet to which it has been worked beneath the surface can undoubtedly be extended in that direction at least to the 300 feet shown on the surface. As to how much farther the ore deposit extends, subsequent development alone can determine.
The deposit is in the nature of a quartz-porphyry, mineralized more or less throughout. The rock, as a whole, carries considerable mineral, but the highest values are found in bunches of iron and copper pyrite, which occur everywhere in greater or less quantities. These pockets of high grade ore are found in vugs, cavities and cracks in the rock, almost always accompanied by crystals of quartz. A very high grade silver ore, some of it showing the silver in its pure native state, is also frequently found where this solid ore occurs. Assays also show that a considerable part of the high grade ore carries from ten to twenty-five per cent of copper.

In order to get a general idea of the value and character of the ore, I had four samples assayed on my last visit to the property, from material which I took out myself. The stuff selected was the iron ore found, as I described above, in pockets.

No. 1 and 2 were taken from the north side of pit in a new tunnel just started.
No. 3 was from breast of south tunnel, and No. 4 fifty feet from breast.

<table>
<thead>
<tr>
<th>No.</th>
<th>Gold Value (Per Ton)</th>
<th>Silver Value (Per Ton)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$12 40</td>
<td>$ 4 40</td>
<td>$ 16 80</td>
</tr>
<tr>
<td>2</td>
<td>37 40</td>
<td>76 00</td>
<td>113 40</td>
</tr>
<tr>
<td>3</td>
<td>23 00</td>
<td>14 00</td>
<td>37 00</td>
</tr>
<tr>
<td>4</td>
<td>34 00</td>
<td>6 50</td>
<td>40 50</td>
</tr>
</tbody>
</table>

To all the above assays should be added, probably, $10 to $15 for the copper value in the ore, the value of which was not determined in the assay, but in previous determinations the copper has averaged about $20 per ton. I have known of assays from this property running over $1000 per ton, and, of course, the ore where free silver is encountered would return exceedingly high results. My samples were taken without special selection. In the new tunnel just started, I should judge, the solid mineral or high grade ore would constitute ten per cent of the bulk of the rock, and nearly as much in the other portions of the mine. The pockets of high grade ore vary in size from an inch to several feet in diameter, sometimes occurring in defined streaks extending several feet. I was not able to examine the shaft sunk in the bottom of the pit, but have been told personally, by a man who is entirely disinterested and whose word is unquestionable, that good high grade ore is found from top to bottom, and in his estimation, the solid mineral constituted one-quarter of the rock. At the time of my examination the shaft was filled with snow and ice.

I have no definite record as to what the property has produced.

I am personally acquainted with the party who had charge of the work while the pit was being excavated, and who ran the dirt through what was then a fifteen-stamp mill, everything being put
through without any attempt to sort the ore.

He informs me that in ten months' operation of the mill he cleaned up $11,000 from the gold caught on the plates, no attempt being made to save the tailings.

From the nature of the ore, which, as shown by the assays, carries a large per cent of silver and copper, a great amount of the value in ore must have been lost and carried away in the tailings, as it is well known that high grade silver ores can not be properly treated in an ordinary stamp mill, very little being saved on the plates by that method, except the free gold, and a large per cent of that escapes as finely divided flour gold.

He estimates that half the product he received would cover the cost of mining and milling the ore which he treated, which, I should think, was a fair estimate.

Assuming the deposit to be only of the dimensions now practically opened up, namely 300 x 300 feet, every ten feet in depth would furnish 300 x 300 x 10 equals 900,000 cubic feet, or about 50,000 tons, or 2,500,000 tons for fifty feet depth. Further exploration is, of course, needed to determine what the extent of the deposit is, but there is certainly a vast quantity of it.

A study of the nature of the material and its mode of occurrence has led me to the conclusion that it is a large overflow of porphyritic rock, the source of which will very likely be found as depth is obtained, in a porphyry dyke, having probably more contracted width, but having extensive length.

It would appear to me that the rock had been thrown up in a molten state and spread over a considerable territory, and perhaps subjected to some further movement after deposition.

That the mass, as a whole, was mineralized somewhat uniformly when deposited.

That in cooling down from a high temperature the mass contracted, resulting in the formation of the cavities and cracks now found.

That subsequent percolation of water has dissolved out the mineral to a large extent in the general mass, and deposited it again in a concentrated form in the numerous vugs and cavities, which is evidenced by the accompanying formation of quartz crystals.

If this theory is correct, and I can think of no more reasonable explanation, then the result that would naturally follow would be that the dyke, or source of the mineral when encountered, would contain ore in a more concentrated form, these dykes being usually less than fifty feet in width; that is, the mineral which in the top overflow is spread over several hundred feet, would be contained within a much less space, and, consequently, richer in value, and it seems to be a fact from my observation, that the high grade ore increases and becomes richer the deeper the deposit is worked.
More extensive investigation would be needed to determine
the most economical method of treating this ore, but it seems evident
that this high grade ore should not be put through the stamp mill,
but should be selected by itself, separated from the low grade ore, and
sent to the smelters for treatment.

In this way only can the bulk of the value be saved. I fully
believe that in working the property a mill can be kept constantly in
operation on the low grade ores, of which a vast amount is at hand and
can be mined very cheaply, and that sufficient profit can be realised
from this low grade ore alone to more than keep up operating and develop-
ing expenses, leaving the high grade ore for clear profit.

To develop the mine properly, a shaft should be sunk and
cross cuts run therefrom at intervals, for I am convinced that the
great values in the property will be found with increasing depth. From
the value and quantity of the ore found now in pockets, and the consi-
derable quantity of extremely high grade mineral which I have myself
seen, combined with the vast quantity of low grade ore, already opened
up, I firmly believe this is one of the best, if not the best, mining
proposition available in this section of the country, promising almost
a certainty of success, with the strong probability of developing into
a truly extraordinary property.

It has been looked upon with great favor by every mining man
who has ever visited the property, and certainly offers unusually great
inducements.

Very respectfully,

EDWIN E. CHASE


Denver, Colo., Jan. 20, 1893.