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REPORT
GREELEY GOLD AND SILVER MINES COMPANY
Como District, Lyon County, Nevada

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ITEM 23

Dear Sir:

GREELEY GOLD AND SILVER MINES COMPANY
Como District, Lyon County, Nevada.

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REPORT
GREELEY GOLD AND SILVER MINES COMPANY
Como District, Lyon County, Nevada

Mr. H. G. Snyder:
Dear Sir:

At your request I have made a thorough examination of your properties located in the Como District, Lyon County, Nevada.

I have studied this district for the past 10 years and am responsible for most of the development work which has lately proven by deductions of the past few years.

SUMMARY AND CONCLUSIONS

There is seldom presented to capital for development a group of mines covering as it does, the major part of a highly mineralized area lately proven on both sides as containing wide veins of high grade gold and silver ore continuous in depth.

This fact, together with the great length of these same and similar veins throughout this property, makes it one of the very best opportunities ever presented for development. I have lived with these ore bodies for ten years and followed their exposures from uncertain prospects to mines whose tonnage of ore will soon place this district among the worlds greatest producers.

The Greeley Gold and Silver Mines Company covers the best of this area and if properly developed will take its place at the head of the list of producers. I heartily recommend its development as an investment, not a gamble.

D. F. MEIKLEJOHN, E.M.

THE COMO DISTRICT

The Como District is on the strike of the great silver zone that runs thru South Western Nevada, almost parallel with the Nevada-California State line. This zone extends far to the northwest, through California and up into British Columbia, and southeast into Mexico. Along its course are the great mineralized areas of the southwest, in Nevada from southeast to northwest are the productive districts of Goodsprings, Tule Canyon, Lida, Candelaria, Tonopah, Luning, Hawthorne, Aurora; the copper mines of Mason Valley, Como, the great Comstock, and Pea Vine that rears its crest nine miles from Reno. The hot springs of Bowers Mansion, Steamboat, Moana and Laughton are fed through its fissures.

less In some of the Nevada districts gold predominates; other camps are noted for deposits of rich silver and gold, while in other instances the deposits are notable for size and richness. The Comstock Lode, which is but ten miles northwest of Como as the Crow flies, contains the greatest precious metal bonanza the world has ever known, and its riches are by no means exhausted. A line drawn from the Mason Valley copper mines northwest to Pea Vine mountain passes through both Como and Comstock. The veins in Como, like those in Virginia City, are fissures in andesite. The ore bodies, like those of Virginia City and Gold Hill, do not quite reach the surface excepting in a few places.

HISTORY

Mineral was discovered in Como by Americans in the early 60's, following the discovery and first development of the Comstock Lode. The early adventurers into the district found evidences that Mexicans had preceded them but had done little more than surface scratching. Ore was mined and hauled by wagon to the mills at Dayton, twelve miles distant. Near the Como shaft was an old glory-hole, now filled with waste that is said to have produced more than a quarter of a million in high gold-silver ore.

The present Como Consolidated Mines Company of 21 claims has been developed only to the 350 level, yet has more than $3,000,000 worth of ore blocked out.

ACCESSIBILITY

The Como district is located in Lyon County, Nevada, 12 miles southeast of Dayton. The altitude is 7200 feet. A good road connects the mines with the railroad.

CLIMATE

The climate is the characteristic climate of southwest Nevada, dry as a rule, snows in January and February which quickly disappear, roads are easily kept open and milling operations can be carried on throughout the entire year.

POWER and WATER

There is an abundance of water for milling and domestic purposes furnished by springs and the mines themselves. Truckee River Power line passes through the center of the group on its way to Yerington.

GEOLOGY

The most important rocks in the district are the Felsites, of which 90% or more is andesite. The flows are all Tertiary Volcanoes or shallow depth intrusions. There are three different flows. The oldest, which is exposed in some places, is very thick, probably not

less than 7,000 feet. It consists almost entirely, with the exception of some intrusions, of Trachite, of a medium grained andesite with phenocrysts of oligoclase in the ground mass of other lime soda feldspars, giving it a porphyritic appearance. This formation is so badly shattered and altered in places that are accessable at the present time that it is difficult to secure a sample of the absolutely unaltered rock even a hundred feet from the nearest vein, and 300 feet below the surface. The flow is full of small stringers of Calcite and quartz and well developed pyrite crystals are found in the seemingly sound rock.

A well defined unconformity separates this lower vein-bearing formation and the younger flow above it. This latter flow resembles the earlier rock in everything except the color, which is light greenish or bluish gray. It probably exceeded more than 100 feet in thickness and almost all of it was removed by erosion. Scanty patches of it can still be found in the northern end of the district.

On the top of the two lower formations rests unconformably a third flow. It also consists largely of andesite porphyry , but considerable quantities of trachite are found. The rocks forming this flow are very much finer grained than those in the formations below and are darker in color. Erosion removed all of it from limited areas, but most of the surrounding country is still capped by it. The mountain peaks around the district almost wholly consists of it and it still has a thickness between 1000 and 1300 feet in some places. This is common country rock for miles around the camp.

The mineral-bearing deposits are in the lower flow of andesite exclusively. Small bunches of quartz are found in both of the upper flows, but they are barren of any valuable minerals. The deposits are all true fissures, no large irregular bodies of ore away from the veins were ever found.

The dip of the veins is seldom less than 60 degrees. The Como, Eureka and the Buckeye fissures are vertical in places, the direction of the dip even reverses a number of times along both of these veins. In general the pitch of the deposit on the south side of the district is greater than further north.

There are, generally speaking, two series of parallel veins in the area, one with a NE/SW strike, and the other NW/SE strike. Frequent intersections between two or more veins are common, and these junctions are nearly always marked by a greater mass of quartz and frequently calcite.

The district is extensively faulted, but the throw of the majority of the faults is small. The fractures run east and west and are usually marked by canyons and ravines. Both direct and reverse faults are common and they are surprisingly pronounced for the small throw they have. The majority of them are later than the veins and are probably contemporaneous with the second and third flows of andesites.

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VEINS - VEIN SYSTEMS

A reconnaissance of the entire area reveals the fact that the vein system that makes the Como District lies along and between two very large quartz veins occupying fault lines of considerable magnitude. They are about three miles apart and can be traced across country for six or seven miles. The croppings stand out in bold relief and while very little explored by development they carry commercial ore wherever developed, and at several points have yielded a considerable tonnage of high grade ore. They strike northeast and southwest.

Lying between these two immense quartz veins are a great many more or less parallel veins having a strike northwest and southeast. Some of these veins were formed at the same time and by the same agencies that produced those of the northeast and southwest strike; others were formed at a later epoch of vein formation which followed the first after a considerable period of time, preveding however, the second andesite flow. At this time some of the first formed fissures with their ores were reopened, extensively brecciated and recemented by the later quartz intrusion and its accompanying thermal activity. The enclosing rocks were completely altered over a great part of the district, especially along the last formed veins which were intruded into an already shattered zone.

The earlier veins are more regular than those of the later period; their walls are more distinct and less altered; slickensides are common. The gangue is mostly quartz, but in several places the croppings show considerable calcite. The silver occurs mostly as Tetrahedrite and with Pyrolusite, rarely as argentite. The accompanying minerals are an abundance of Barite and Marcasite, with some Sphalerite. The old is free or with pyrite. Oxidation extends to two hundred feet; partial oxidation to three hundred feet where the zone of primary sulphides is found, and so far as developed in the Como Mines Company workings it has proven to be very wide, with long shoots of high grade milling ore.

In the later veins, Tetrahedrite and Sphalerite are rarely found; Pyrolusite is common, and the silver occurs as chloride in the oxidized zone and as argentite in the primary sulphide zone below; oxidation extends deeper than in the earlier veins and when the primary sulphide zone has been more thoroughly developed, the same mineral will no doubt he found here as were found in the earlier veins in the primary sulphide zone. As tetrahedrite being of the earlier decomposed minerals, and due to the looseness of the later veins, it is safe to assume that it has been almost completely removed from shallow depths.

In the workings of the Como Mines Company recent developments on both the Como Eureka and Rapidan veins have proven the zone of primary sulphides to continue in depth and to contain ores rich in gold and silver. What is true in the Como Eureka and the Rapidan veins will prove true throughout the district.

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There seems to be a zone of impoverishment in most of the veins at a depth of from four to one hundred feet below the surface and, as near as can be determined, it extends 20 to 60 feet before the ore appears again. This condition has been caused by the action of Vadose waters carrying alkaline sulphides. In many places this zone is so completely kaolinized that the quartz left has the appearance of being crushed, leaving rounded fragments.

Below this kaolinized zone the vein continues as a solid quartz vein. This leached condition of the veins has been the cause of the district remaining practically unknown for so many years. The early miners reached the poorer ores and quit. The work on every level of the Como Mines Company mines proved this condition and shows that the original vein filling below this zone is rich enough in gold and silver to be commercial ore.

The largest of the earlier quartz veins, called by the old miners the Mont Como Vein as before mentioned, was intruded along a well defined fault line traceable through the district for about 6 miles, the quartz and partially silicified wall rock standing up in many places as very large and bold croppings. Branching is common, and through the central part of the Como district many of the later veins intersect with, but seldom cross, this main vein. This vein has been but little explored throughout its entire length, the deepest workings is a 200-foot shaft on the old Mont Como property, where high grade milling ore is now exposed. To the north in the stone cabin and Wild Rose groups this solid quartz vein and its branches can be found outcropping continuously for several miles. High grade gold and silver ores are found in many places on both properties, yet no serious development work has ever been done except in very shallow pits and tunnels.

The parallel fault, which in many places is similar to the Mont Como Vein, lies 3 miles to the southeast and has been intruded by the quartz of both periods of vein formation from what is locally known as the Pony Meadows vein. All of the later period veins lie between the Mont Como vein and the Pony Meadows vein. (Recent developments in this vein have exposed ore sufficient to justify the erection of a 200-ton mill and cyanide plant.)

Crossing the district diagonally with a strike north 65 degrees east and intersecting all veins of a northwest-southeast strike is the great Como Eureka vein. It has been partially developed in the Como Eureka mine and has been the camp's largest producer. It belongs to the earlier vein series and must be considered as one of the most important features of the district. To the west it intersects one of the later veins called the Rapidan vein; the junction is characterized by an enormous outcrop called the Buckeye Vein under which a large body of high grade ore has been developed. The continuation of this vein southwest is covered by the later andesites and underground development

is the only way its continuation southwest can be proven. There is very little doubt, however, but that it will continue many hundred feet under the andesite capping. To the northeast it intersects several large veins, all of which have been enriched at the point of intersection.

The only serious development work in the camp has been done on the Como Con. property, which must be taken as a criterion for the remainder of the district. No special condition exists here that is not found in the major portion of the mineralized area. This property has produced in the neighborhood of a million dollars, and today it stands as one of the largest potential mines of the state of Nevada. In the working of this mine both series of veins have been explored and ore now known to contain long and wide bodies of $10. to $12. ore.

The richest gold vein of the Como mines group is the Lucky Sunday vein. This has been explored by several shafts east of the old Como mill about 2000 feet. The richest ore was found near the south end of the Lucky Sunday claims. The vein can be traced thru 3 adjoining claims to the southeast where it finally joins all of the NW/SE claims on the Lucky Boy (and Lucky Girl) groups.

THE GREELEY MINES COMPANY CLAIMS

The Iron Dyke group occupying all of the ground between the Stone Cabin Consolidated Mines Company and your Mt. Lincoln Group. These veins cover a series of veins that are of the greatest importance, the principal one of which outcrops in a very large mass of iron oxide, probably the capping of a sulphide ore body. Besides this vein there are 10 or 12 similar fissures crossing those claims, some of which pan free gold on the surface. ?

From the new Pony Meadows mill the great Pony Meadows veins continue north into the Silver Tip group thru which they pass for 4500 feet. Both parts of the vein outcrop as well defined quartz ledges this length, and trenching has proven values in excess of $12. a ton.

The Republic Group. Here is found a series of veins having a strike more nearly E & W, or about parallel to the well known Como-Eureka vein which produced almost a $1,000,000 in the old Como-Eureka mine, which recent development has proven to be rich at a depth of 600 feet, where now exposed in a long crosscut tunnel of the Como Mines Co. This vein is made up of a large solid quartz vein that has been broken, shattered and recemented by the solutions following the second period of ore deposition. The zone of crushing extended to the footwall of the first vein and a very large wide zone of metamorphically replaced andesite varying from 20 to 30 feet in width was formed, which sampling shows to be an ore body carrying on an average of $6.00 per ton gold. This ore body is exposed in a crosscut near the Mayflower tunnel and represents a possibility of great magnitude. The main quartz vein near this point produced about $15,000 from the surface outcrop where ore still exists, assaying from $9. to $14. in gold per ton.

It is impossible to give more than a general idea of the territory covered by the claims now owned by the Greeley Gold and Silver Mines Co. It is safe to say that any group mentioned herein will make a profitable property if properly financed and developed. Getting these properties together has taken almost two years constant effort on the part of H. G. Snyder, whose vision of the district inspired him to acquire every approved and available claim so as to cover the extensions of the largest veins that were being developed by the Como and Pony Meadows companies, before anything had been proven and at a time when all work was at a standstill (and since that time two large mills have been erected and are in operation, and one other discovery is shipping ore running from $25. to $35. a ton).

These discoveries mark the beginning of a mining activity in this district that will rival the best days along the Comstock lode in Virginia City, and from the number of veins and the length of ore exposed it is safe to predict that the production from this district will, within the next few years, surpass those of the best days along the Comstock. The value of the holdings of the Greeley Mines Co. cannot be over estimated as they cover nearly all of ore-bearing croppings in a district that will shortly become one of the largest producers of gold and silver in the State of Nevada, if not in the United States.

This report on the Greeley Gold and Silver Mines Co.'s properties is not the result of a casual inspection of the various groups and their vein systems, but it is the result of almost ten years constant contact with the mines of the district and from a repeated study of each particular ore occurance. The predictions made by myself ten years ago have now been proven by the latest development work in the district and I feel safe in making recommendations for the development of this remarkable area, which I do not hesitate to recommend to any company desiring a group of mines which no doubt will become producers of the first class.

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End of excerpts from Meiklejohn's report

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Since date of this report the Wild Rose has been discovered, from which owners (Meiklejohn chiefly) have been shipping carloads of ore to the Salt Lake Smelter from which they recovered an average of about $30. a ton. Press reports that this property was sold last week for a large consideration.

This shipping ore was taken from an outcropping 30 feet above the surface, as shown by a photo which is inclosed and which also shows the ledge outcroppings characteristic of the country, also of the 16 claims adjoining the Wild Rose group which are owned by the Greeley Co., not, however, mentioned in the Meiklejohn report.

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The last named claims are known by us as the Baker group and have every indication to warrant thorough examination for the fact is that wherever such examination has been properly made in this district very valuable mines have been discovered. The Como with now a 300 ton mill, the Pony Meadows with now a 250 ton mill, and the Wild Rose with $30. shipping ore, and which we are advised has just passed into the hands of men competent to establish similar improvements.

The Meiklejohn report was endorsed by E. S. Bowman, E.M., who was for many years the mining engineer for the late Senator Clark, who aided in the selection of the Greeley claims, and who writes that every claim was carefully selected. They straddle huge veins, some 69 claims wherein it is reasonable to expect to find several mines as important as the three which are now in motion.

Inclosed is a tracing showing relative location of the Greeley claims as furnished by Meiklejohn, which I am hurrying to you in crude form to get it off today. It will suffice for preliminary glance. We are weak in that we have no identified assays. That is the reason we desire an assay map made and are willing to give an option on all the claims on a gross royalty for the expenditure of $1500.00 to $2000.00 to supply such an assay map. Assessment work for this year is again abated, hence we are relieved of that expense.

Developments on the Wild Rose group creates some excitement, air letter from Salt Lake City urges me not to put price on Baker claims, that men are trying to negotiate. I am not moved by such flurries. The only intelligent way to price a mine is first to assay the value of its ledge, and geologize its evident continuity. This is the largest structure of gold and silver mineralized formation yet found on this continent - mining engineers say. The ore veins are 60 to 100 feet wide and 2 to 7 miles long, visibly.

The crudeness of this is, that I did it and tried to hurry.

Respy submitted,