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PRELIMINARY REPORT ON McNAMARA LEAD MINE
PALMETTO DISTRICT, ESMERALDA COUNTY, Nev.
November 4 1948 by Harry H. Hughes

Location and
Accessibility

SW 1/4 Sec. 6, T. 55, R. 40 E.

The McNamara property is located in the Palmetto Mining District at the south end of the Silver Peak range of mountains, on the north slope of Palmetto mountain. It is about 18 miles south of Silver Peak Esmeralda County Nevada. Goldfield, the county seat lies about twenty five miles in an air line to the northeast. Elevation of the lower tunnel is about 7200 feet.

The property is reached from Silver Peak over a fair desert road to with in one mile of the mine. The road for this last mile is steep and rough. Silver Peak is the end of the oiled section of state highway No 47, which connects with U.S. highway 6 and 95 at Blair junction, 20 miles distance. Blair junction is 35 miles from Mina, the nearest railroad point.

Year around operation at the property is feasible, altho provision would have to be made to clear snow from the last mile of road, since at times during the winter months it falls to a depth of two or three feet. However 15 inches of snow fell at the mine on October 30, 1948 and this writer had no difficulty in reaching it in a jeep car.

Property

The property consists of three claims, all held on possessory title; The Galena, Galena No I and Galena mill sight. Since the Galena is the only claim covering the strike of the mineralized zone this writer has located several claims along the strike of the zone, which can be traced on the surface for over a mile. More claims should be located for protection.

The Galena millsite claim covers a spring which makes enough water for all domestic and milling purposes. The Galena No I covers the ground between the millsite and the Galena claims, on which is a two inch pipeline about 1200 feet long, from the spring to the mine.

Topography is rugged and rises rather abruptly to the Palmetto peak which is some 1800 feet higher than the workings. The ground is moderately covered with nut pine (pinion) and scrub cedar.

History

According to Francis Church Lincoln in his "Mining Districts and Mineral Resources of Nevada" published in 1923 (pp 79-80), the McNamara was located in 1880. It was worked intermittently by less ore for forty years and Lincoln say "The McNamara made a considerable production of lead silver ore in the early days". One oldtimer told this writer that he remembers McNamara ore was freighted in wagons to Bodavill, the rail head in those days. Undoubtly it was shipped from there to Selby smelter at San Francisco. No records of any production what ever are available.

The property has been idle since twenties untill this summer of 1947 when the writer acquired it under lease and option. Some cleaning out of the property was done and a small shipment of selected ore was made. This assayed 49.0% lead and 8.4 Ounces of silver per ton; and returned a net from the smelter of \$113.04 per ton. Another small shipment of selected ore was made recently

and assayed 48.4% lead and 10.2 ounces of silver per ton. this returned a net of \$138.00 per ton, since the lead was paid for at 19.5¢ per pound.

Geology

The deposit is situated about half way up the north slope of Palmetto mountain in Paleozoic sediments which consists mostly of thin bedded, impure limestone. The core of the mountain is a granite stock, the contact being 700 to 1000 feet above the McNamee mineralized zone. At the mine the limestone is unaltered except for some silicification; but a few hundred feet above the limestone has considerably garnetized.

The ore deposit is of the replacement type formed along a fault fissure with an altered acidic dike (alaskite or aplite) for the hanging wall. The ore zone strikes N 60°W on the surface and dips steeply to the NE. It can be traced for more than a mile. The outcrop is a redish brown quartz and jasperoid, below which, and not so noticeable, is a zone of barite. The barite being softer than the quartz, has eroded faster and is hidden by talis. Some of the lead mineralization is associated with the barite.

The barite is later than the lead mineralization and is probably the latest of all of the deposition. Galena is the most common lead mineral to be found in the deposit, altho some carbonate is present. Crystals of wulfenite, the lead molybdate, have been noted as crusts on Galena, and where there is more quartz in the vein occasional stains of oxidized copper are found.

Both in the under ground stop and in the glory hole a very rough banding of the ore is noted across a width of from 15 to 30 feet. On the hanging wall, under the acidic dike, is a foot or more of limonite with bunches of Galena or cerussite, then several feet of barite which is usually very rich in Galena; then several feet of what appears to be an almost completely silicified limestone, highly crushed and carrying considerable disseminated galena and some copper stain. On the footwall is six inches or a foot or more of a greenish fault drag or breccia with an occasional bunches of galena or cerussite as a part of the drag material.

It is suggested that the structural controls of the lead mineralization is the junction of the N 60°W fault fissure with a series of E 80°W fractures.

In sufficient work has been done to prove any theory, however and another possibility exists. It could also be that the one ore body which has been mined is a faulted segment of a pipe. It will be noted in the transverse section that the ore body that has been mined underground is entirely disconnected from the glory hole. Near the surface they are separated by ten or more feet of adike which is more basic than the acidic one, having the appearance of a leached andesite. A short distance below the upper tunnel, in the slope, this dike feathers out in a wedge; and the writer in picking in the footwall of the slope found the fault drag mentioned above. Two three foot holes were drilled in the footwall and when blasted opened very good ore (20-25%) lead. Another fact which supports the theory that the ore body is a pipe is that far at least 125 feet southeast of the gloryhole, on the surface, good showings of lead are found across a width of 150 feet.

If the one ore body that has been opened is a pipe, it is not intended to infer that it is the only one along the mineralized zone because the writer has found barite and lead some 2000 feet southeast of the workings. No work has been done on this showing.

Sampling

There are a number of showings of ore in the mine and the gloryhole and on the surface that will assay from 10 to 50% lead; but this writer feels that cut samples are very apt to be misleading

and almost impossible to take accurately. To get a fair picture the ore should be broke and shipped in fifty and one hundred lots. This is the only way that highgrade ore and lean material can be averaged.

From experience in mining the ore, some sampling of it, and samples of the dumps (which are rejects from sorting in former operations) there is no doubt that the ore in the virgin ore body would have averaged between 15 and 20% lead. The writer is presently mining on a pillar in the old stope which has remaining in it between 500 and a 1000 ton of ore which will average no less than 20% lead (and probably 25%) across a width of 10 to 12 feet.

Tonage Possibilities

Additional prospecting and development work is required before any estimate of tonage possibilities can be made with any degree of accuracy. If the known ore body should be found to be a pipe with the area indicated by surface showings this one ore body alone would contain about 2000 tons per vertical foot of depth of a low grade-grade ore which could only be mined on a relatively large scale.

However there are several thousand tons of shipping or highgrade milling ore indicated in the workings presently opened, and in the writers opinion every likely hood that a relatively small amount of work will increase this amount.

It may be noted here that the MoNamara was thought to be a silver mine by it's operators, and it is possible that some of the surface ores carried high values in silver; but the lead is relatively low in silver averaging less than 10 Ounces in silver per ton. In the writers opinion this can be the only reason why the property has been no more extensively developed. With such low silver value even a 50% lead ore would not have been highgrade in an isolated district when worked in a small way.

Development a. Present

The deposit has been opened by three crosscut tunnels in a vertical range of 103 feet. The lower has a length (crosscut) of 230 feet to reach the vein; the middle has a length of 100 feet and the upper a length of 20 feet. Above the upper tunnel is a small gloryhole extending 40 feet to the surface.

There is also two raises connecting the lower and middle tunnels one of which is filled with waste which has been washed in from a cloudburst, the other was cleaned out this last summer and in the writer's opinion, in the hanging wall of the dip of the ore. There is also a raise from the middle tunnel to the upper one which is plugged with surface wash.

There is a winz from the lower crosscut tunnel at the ore zone. It is said to be a 100 feet deep, but one wall has slufed so the bottom could not be reached.

Along the strike of the mineralized zone the lower tunnel has been driven a length of 200 feet, but in the writer's opinion the work has been done to far in the hanging wall to cut the zone of the lead. It will be noted that just inside of the middle tunnel is rather wide fault zone, under which is some 30 feet of crushed quartz and barite with some copper stain. Then quartz and limestone and the dike, under which is the lead zone. The South east drift on the lower tunnel apparently has been driven in the outer zone of the quartz and barite, under the fault, and it is believed that the lower tunnel should have been continued farther

in to the foot wall to pick up the lead. This is particularly true if the writer's idea of intersecting fractures controlling the lead deposit is correct.

No drifting or crosscutting has been done in the ore zone on either the middle or upper tunnels except in the one ore shoot which has been mined. To the southeast in the upper tunnel a small amount of work has been done which has opened a body of barite carrying considerable galena.

On the surface above the upper tunnel, several small open cuts have been made which barite galena and quartz.

The stope which has been mined has a length of about 80 feet, an average width of about 12 feet and was mined from the surface to the middle tunnel, a slope distance of 90 feet. In addition to this and, as noted, disconnected from it is the glory hole which is roughly 20 by 30 by 20 feet thick. At the elevation of the middle tunnel, to the northwest, the stope is cut off by a fault or intrusion of the basic dike. To the southeast, however, the small stope opened at the upper tunnel is beyond the large stope and the wide extent of surface mineralization is in the footwall of all workings at any level.

In the lower tunnel the writer has found the same fault large mentioned previously, and under it very good ore. This is in the angling footwall crosscut NW of the chute and the ore was no doubt overlooked by former operators because the crosscut was driven along a solution channel which coated the wall with more or less calcite, calcine and some gypsum.

b, Proposed

The quickest way to determine the extent and possible value of the mineralization would be with a diamond-drilling program. Three or four thousand feet of holes would be plenty to prove definitely the presence or absence of more commercial ore bodies. Most of the drilling could be done from the surface and depth of not over 500 feet would be sufficient. Before laying out a detailed drilling program a geophysical survey (using the induction method) would be of advantage, the use of it being used in laying out the holes.

At the time the drilling campaign would be under way the plugged raises should be cleaned out and a crosscut driven in to the footwall on the lower and middle tunnels.

With favorable results from the drilling and/or crosscuts the additional development work necessary to open positive ore would be done to determine the size mill required.

The type of ore contained in the deposit is such that the milling would be very simple. The lead frees at a relatively coarse mesh and since there is no zinc in the ore a splendid recovery would be made with strait flotation (probably 90% at least). In fact for a small operation a very satisfactory concentration could be made by crushing the ore with rolls and then jigging the crushed ore.

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COMPLETE REPORT

of Preliminary Examination of McNamara Galena Mine Esmeralda
County, Nevada, Made May 10 and 11, 1919

BY

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Goldfield and Tonopah Nevada.

The Galena group of lead mining claims, commonly known as the McNamara mine, is situated about eight miles westwardly from the town of Lida, sixteen miles south from the town of Silver Peak and thirty three miles by wagon road from the town of Goldfield all in Esmeralda County, Nevada.

Goldfield is the nearest railroad point, all mining supplies for this section coming from that point and all ores or mill product shipped would go through Goldfield.

The road connecting the Galena mine with Goldfield is a very fair desert mountain road and may be traveled by wagon and auto truck with comparative ease.

The group consists of sixteen claims held by location, possessory right. On the claims are two series of cold springs which flow, without development, slightly over 90,000 gallons per day. The amount of ground kept wet by these springs, and which would be wet even though the springs were forced to give more water, is ample to raise garden truck sufficient to supply a small mining community.

The elevation of the group is 6,200 feet. The road can be kept open practically all year.

There is an abundance of nut pine of ample size for all mining purposes, which eliminates the high cost of purchasing and hauling mining timber in, this being a very important item to be considered.

The presence of water on the ground in sufficient quantity for mill purposes, which if settled and re used in the milling operation, would permit the erection of at least a 100 ton per day capacity. The presence of sufficient timber on the ground for all mining purposes, linked with the open climate which permits mining to be prosecuted all year--these are conditions in favor of a mine in any country a combination of conditions rarely encountered in any mining section.

HISTORY

The McNamara mine was located in 1880 by Matt McNamara and held by him for a great many years. In 1903 it was optioned to Lynch & O'neary, who drove a tunnel to the vein, 250 feet from the adit of tunnel. The option was not exercised by optioners, as they were looking for of a shipping value, which condition did then not exist.

The ore deposit held by these locations is on a granitic (alaskite) contact. This contact has a northwesternly strike and is traceable on the surface for over a half mile. The line is of the blue cherty variety. The contact is very distinct and quite strongly mineralized along its surface exposure; the strongest mineralization being at the point where it is now opened up. At this point there are three crosscut tunnels and a shaft. It is well known that a granitic-line contact is the natural home of lead silver ore bodies. Deposits have been found of tremendous size under this same geologic condition.

The Lucky-boy mines, about 70 miles north, are found identically with this body. Their production has placed them with the foremost with Nevada's silver-lead mines.

DEVELOPMENT AND ITS RESULTS

The ore deposit is opened by three crosscut tunnels and a shaft. The lower tunnel is 330 feet from edit to vein, next tunnel 110 feet to vein, the upper tunnel was naturally the first run and is practically inaccessible. All data is readily procured from lower two tunnels and surface. The shaft is in bad shape so no examination was made of the vein in shaft.

For convenience we will call the upper tunnel No.2, The intermediate tunnel No.1, and the lower tunnel No.3.

As before stated, the main results are obtained from the surface out crop and tunnel No.1 are the unmistakable evidence of the existence of an ore body in the contact at this point. A sample taken of dump No.1 tunnel, representing about 2,000 tons, assayed 6.6 oz silver 11.10 % lead, or \$ 19.10 per ton.

Tunnel No.2- This tunnel is about 110 feet long before encountering the ore deposit from which ore has been extracted. The length of the ore shoot at this point, as shown by ore taken, is over 60 feet the width stopped in places being over eight feet. A sample taken from the Galena left in south end of this stop is 12 feet over length of tunnel, went as following (width of streak taken two feet) Gold, trace; Silver 20.00; lead 16.3 %; total value \$ 37.40 per ton. While the writer has no direct knowledge of value of ore shipped from this stop, his information is that 80 tons of ore were shipped to smelter which returned, gross, \$ 70.00 per ton, the shipments average 12 ounces silver per ton.

A winn is sunk on the ore from this tunnel level showing continuity of ore body. On this level the tunnel is continued well in to the granite.

Tunnel No.3, Length of tunnel to ore body, 330 feet. At this point the contact is drifted on for 50 feet, but because of muck left in drift from stoping operations it is impossible to reach northernmost face at this time.

A stop has been started from drift on this level, reaching at its back about 15 feet above tunnel level. A sample taken in this stop gave the following results (width taken, two feet) silver 20.1 ounces lead 17.3%; total value \$ 37.40 It might be well to note here that sample from this point gives identical value with that taken in No.2 tunnel though slightly different percentages in silver and lead.

The width of the contact at this point of intersection with the tunnel is ten feet. Three samples were taken here, with results as following: three feet on footwall, Gold trace; silver 2.40 ounces; lead .70% value \$ 3.15 Three feet, hanging wall, Gold trace, silver 4.40 ozs lead .16% value \$ 4.65

A sample taken on dump, at tunnel edit of ore that would be picked from main bulk of ore which would be milled, gave silver 15.1 oz lead 57.2 % total value \$ 73.30. Which corroborates statements of value of ore shipped, also tending to show values which may be encountered with depth as work is prosecuted.

ARGUMENT AND CONCLUSION

The Galena groups of lead mining claims possess real merit properly opened,

financed so as to fulfill requirements exacted in developing a mine, should return investors good profit on their investment.

The mine as opened up at present proves the existence of an ore deposit, the size of which, in a lime-granitic contact, will enlarge in depth if other mines under the same conditions may be used as precedent. For example, the Lucky Boy mine had no body of ore until the depth of 350 feet was attained (vertical depth of Galena tunnel No. 3, to outcrop above 170 feet). From the 350 feet to the 550 feet level the Lucky Boy produced over a million dollars (silver at 85 cents). This is used as a comparison as it is the closest lead silver mine to Oleana but some may be learned of all lead-silver mines in granite lime.

The amount of work on the Galena is comparatively small; further drifting may at any round of holes open up a new body of ore or the extension of the present body.

In conclusion will state that the groups of claims should be opened up below the No. 3 tunnel to a reasonable depth and drifts run along contact to prove extent of ore bodies. As is known in mining, this character of deposit, the width and length of shoots sometimes reach immense size, it is reasonable to believe, all surface conditions considered, together with values obtained, that there is a large body of lead-silver ore in the Galena which has been worked to date above this main ore body.