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Item 1

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0400 0001

May 27, 1942

Board of Directors,
Nevada Zinc Corporation,
Boise, Idaho

Gentlemen:-

Complying with your request for a brief report covering the geology, mining conditions, and ore possibilities of your Mystary Mine, situated in the Centennial Mining District in the Northern part of Elko County, Nevada, I made a rapid field inspection of the property in the latter part of May, 1942, and herewith submit the following:

Since all title matters will be set forth in the title abstract which I understand is to be furnished you by the owners from whom you are purchasing the property, it will not be necesary for me to discuss title matters herein, excepting to say that development work is being carried on to take care of all yearly assessments for unpatented mining claims, even though this has been recently exempted by Act of Congress.

Property and Location:

This property consists of FIVE unpatented claims situated along the western slope of the Centenniel Range near the head of one of the small mountains tributaries of the Owyhee River about 12 miles ~~north~~ South west of Mountain City. It is some tow miles east of the old Post Office of White Rock in what is known as the Centenniel Mining District. (Bull Run, Aura)

Accessibility:

The nearest railroad town is the town of Elko, Nevada, some 80 miles to the south of the main transcontinental line of the Union Pacific Railway.

The road from the mine to Elko is an improved, graded and for the most part graveled highway. The County road crew is now at work putting the road near the mine in good hauling condition. This will be the main outlet from the mine to railroad.

The road from the mine to Mountain Home, Idaho, a distance of some 160 miles is an excellent highway, graded and graveled from Mountain Home to the town of Owyhee and beyond to within a short distance of the property.

The natural haulage route will be south to and from Elko where railroad transportation will be convenient both east to Salt Lake City and west to Reno and SandFrancisco and other points.

Topography and Drainage:

The Centenniel Range is a high open range, rugged and rough in places, but largely consisting of the ore smooth mountain slopes, with little timber excepting in the canyons and narrow valleys of the higher mountains. Definite elevation data not being available no accurate statements can be given as to elevations, although the mountain peaks are said to be well over 7,000 feet in some cases.

The lower valleys and the plains country surrounding the mountains consist of flat to rolling sage brush land, usually classed as arid or semi-desert land, but carrying considerable bunch grass among the sage, making possible to pasture stock in much of the area to a good advantage. This grass is sometimes supplemented by hay meadows along the lower valleys along the streems where irigation can be practiced or where there is sub-irrigation.

There are numerous streams heading the higher mountains, all of which, in this area, are tributaries of the Owyhee River, which flows northwest through the southwestern corner of Idaho into Oregon, then northerly empting into the Snake River west of the town of Parma, Idaho.

HISTORY:

There is not much infromation available on the development and production of the mining properties of this general area and production of the mining properties of this general area. According to Bulletin No 408 of the U.S. Geological Survey, there has been considerable prospecting in the area for gold and silver in the past with some production. The mines were formerly considered to be of value mostly for silver, with small content of zinc, lead, copper and gold.

However, within the past few years deeper development near Mountain City disclosed a very large body of excellent grade copper ore, and this mine, known as the Rio Tinto mine has made an enviable name for itself in the past few years as one of the most valuable large producers of copper ore. The Rio Tinto mine is about 12 miles from this property. There is no record of past production from this property. Its large ore body was only recently uncovered.

Geology and Petrography:

The geology of this area appears to correlate very closely with that of the Mountain C ity area, which which is treated in Bulletine No 408 of the U.S.Gelogical Survey as follows:

" Rocks at Mountain City are limestones and shales intruded by granodorite and overlain by rhyolite and basalt. The grano-diorite is composed of plagioclase, orthoclase, quartz, mica and hornblende, The grano-dorite (in the Mountain City Area) is out by aplite dikes composed of quartz and ortholase".

" The grano-dorite is younger than the limestone, which it intrudes causing contact metamorphism. Where the rhyolite floas were noted above the grano-diorite the contact relations could not be made out. But for consideration of aries else where the royalite and basalt are regarded as of later origin than the grano-dorite, and at Mountain City they are probably later than the deposition of the silver ores."

On this prope ty a granitic outc rop, probably grano-dorite, contains numerous small granets, indicating contact metamorphism between granitic rock and the limestone to the east. In the contact zone between the granite and the lime there is a schist area of unknown width. The schist and other rocks along this contact zone are much altered, sheared and the mineral oxidized, indicating considerable movement along the contact as well as leaching and oxidation of the contained minerals.

The limestone lying to the east of the contact, where observed, was soft and considerably disintegrated, indicating more or less crushing and grinding and possibility disintergration due to the action of surface water carrying minor acid amounts derived from the oxidation of the minerals along the contact. It would probably not be possible to de ermine the age of this Limestone without an extended study of the area. So far as I was able to find, Bulletin No 408 of the U.S.G.S. does not state the age of the limestone in this area. However it is suggested that the limestone is probably of Cambrian or earlier age.

Faults and Dikes: The shear plains on both sides of the main ore body indicates a strong movement along and in the contact zone, some of the movement no doubt occured later than the mainmore deposition. It is suggested that this shering may have cut across the main ore body at a sharp angle ,and the movement shifted the two ore bodies past each other in an over lap situation so that there now appears to main ore bodies instead of the original one. This can only be determined by development.

The time spent in the inspection of the property was not sufficiently long to search out and determine whether there were any dikes or not, but it is expected that there are some dikes or other intrusives in the area, and that such intrusives may have had some part in the mineralizztion of the district.

The Vein: The large ore vein along the contact is without doubt a true fissure vein. However, there has been more or less replacement of the crushed rock fragments by the ores and minerals contained in the ore body.

The No 1 vein where cross-cut in the No 1 tunnel has a width of 32 feet, and the vein filling is highly silicious, particularly in the lower grade portions of the vein.

The No.2 vein, across the shear zone 45 feet east of the No 1 vein, has much the same characteristics as the No 1 vein, so far as development on it has proceeded. Its full width has not yet been reached.

Mineralization:

The vein in the upper part of No 1 is considerably oxidized, while in the floor of the tunnel the vein is almost a solid sulphide vein. An open cut on the No 3 vein on the surface is much oxidized. Unaltered pyrite occurs in the veins in the tunnel, especially near the floor of the tunnel.

Assays of samples taken at the time of my visit gave values as follows:

No 1 across 6 feet width on the hanging wall side of the Vein--17.0% zinc;
No 2. across a width of 5 feet next to sample No 1; assayed 7.2% zinc;
No 3, across a width of 21 feet on the footwall side of the vein, assayed 3.3% zinc;
No 4, across a width of 8 feet at the face of the tunnel on the on the No 2 vein with the full width of the vein undetermined, assayed 3.0% zinc.

The first three samples were on the No 1 vein, while the fourth was on the No 2 vein.

The first three samples showed an average of 6.48% across the No 1 vein for a width of the 32 feet. Assays taken by others gave some higher values in zinc with low values of other metals. One sample assayed by the Combined Meatls Reduction C-ompany of Stockton, Utah gave the following results; Gold -Trace, silver-0.18 Oz; Lead-0,3%; Zinc-32.5%; Iron- 19.2% Insoluable - 13,2%.

This sample indicates the high quality of the zinc with little ornone of the other metals to interfere wirh the zinc.

Development:

Outside of some surface cuts and excavations at various places along the vein, the development cons ists of a cross-cut tunnel cutting the main vain some 200 to 250 up the mpuntain side above the Creek. This cross-cut tunnel runs South 30° East 30 feet; thence running South 80o to 85 o East 85 feet, making a total length 115 feet.

Ore reserves:

In making an estimate of ore developed and available for mining, it would be necessary to mention that the development is limited and that th tonnage proven and developed would be small in relation to the magnitude and extent of the ore body as disclosed in the cross-cut tunnel and in the open cut above.

It is very evident that the ore body has a width and extent of such magnitude that it would not be fair to the property to make an apprisal statement at this time. This should wait till the planned deeper working tunnel has been run in on the footwall of the vein for a distance of not lass than 500 feet, and crosscuts of the ore body made every 100 feet to determine the width, extent and value of the ore body or bodies after the preliminary work has been done. At the present time development is in the beginning or initial stage and is not far enough along to justify an appraisal at this time.

Deeper development will also determine the extent and character of the ore at depth so that proper process of treatment can be worked out for economical and efficient operation.

C onclusion:

The ore bearing vein on this property appears to be a part of a mineralized are of zone extending in a northerly- southerly to northwesterly-southeasterly direction for a good many miles.

The ore bearing veins of a large part of the district were formerly considered silver veins, and their past production has been mainly in silver, although these veins usually contained minor values in gold, copper, lead and zinc.

Deep development of the Rio Tinto mine near Mountain City, some 12 miles southeast of this property, disclosed a high grade copper ore body of great size, extent and value under geological conditions similar to that on this property.

The one main ore body, desiganted No 1 vein, has a known width where opened up of 32 feet. Beyond this to the east is a mineralized shear zone of 45 feet in width. beyond this to the east is asecond ore body, designated the No 2 vein, the width of which is not yet been determined. These two veins are expected to retain their full width and value or may increase in value with depth, while the sheared zone between is expected to carry higher milling values in the deeper sulphide area below the zone of oxidation. Thus it is reasonable to expect that at depth these three mineral zones will make a workable ore body of not less than 85 feet in width, and possibly wider.

In the mining business mines are naturally grouped in there classes depending on the stage of development they have reached:

1,- A prospect in which the value of the mine is judged entirely by the geological conditions favorable to the formation of ore deposits. In this case the first money spent in the development of the property entirely prospective.

2,- A partially developed mine in which the f ormer prospect has been proven to be commercial; First, by disclosing ore bodies of commercial extent and value within its own boundaries; and second, by development of adjoining properties on the same ore zone s into paying mines.

At this time the former prospect has become a mine with the assurance of a sufficient life as a working mine to guarntee to the return of a reasonable investment of capital with an attractive earning, but the length of life or full earning power of the properrty has not at this time been fully demon strated.

The mine at this stage is the most attractive investment, since it has a margin of safty that should be attractive to the conservative investor, and since it also has a large prospective value in addition to the safty feature.

3,- The third calass is a fully developed and equipped mine in full or maximum production, with a large ore reserve blocked out, insuring a definite ore supply for its plant for many years.

In this case the value of the mine has already reached the maximum and its securities have advanced to their full market value. Inthis case the safty feature predominates with a low return on the investment, but with little or no speculative feature. In this class the investor has a safe investment, but there is little or no chance of making large profits such as is possible in class 2.

Finally, the development of this property should be properly be done at this time, through a deep working tunnel along the footwall of the vein, with cross-cuts and raises to develop and block out ore ready for milling. When fully developed as it should be, this property bids fair to become one of the largest and most valuable zinc deposits in the western part of the United States. It is quite possible that the ore body will contain important copper values with depth.

The future outlook for this property is very bright.

Respectfully,

Jesse R. Villars.