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CONTACT MINE ZONE

CONTACT, NEVADA

ANALYSIS AND RECOMMENDED DEVELOPMENT

AND FURTHER EXPLORATION PROGRAM

On Claims of

Coralta Nevada, Inc.
(Coralta Resources Ltd.)
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Vancouver, B.C., Canada

By

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December 10, 1977

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Forward

A great deal of data is available on the Contact Mine and it is not my desire to reproduce any more of it than is absolutely necessary.

I have endeavored to pick up the conclusions of the engineers and geologists who have previously reported on the property as noted in the references; and to add to the previously blocked out ore reserves the ore developed by the Phelps Dodge drill holes (1972), and by my own recent work on the project.

I followed the previously set forth plan of calling 2.3% copper ore equivalent high grade, and lower grade lumped into low grade. As a practical matter, however, one would mine the full width of the veins down to low limits, and not cut off arbitrarily at a grade such as this. This would lower grade, and raise reserves. More will be learned about this aspect as mining progresses.

The Vivian Tunnel work suggested will prove useful for any future development, and will place one in a position to begin mining while evaluation and planning continues. This is a beginning.

Title

The Coralta Resources Limited property is composed of approximately 308 unpatented claims and 155 patented claims, as well as a parcel of land in the SE¼ of the SE¼ of Section 36, T. 45 N., R. 63 E., Elko County, Nevada.

There are various lots, with surface rights, excepted from some of the claims in the Contact Townsite.

Several title reports have been made from time to time on the claims and title insurance policies have been issued on some of the patented claims.

Coralta Nevada (Coralta Resources Limited) holds the claims by several leases and options.

Transportation and Facilities

Paved State Highway 93 passes through the property and there are dirt access roads to all areas of the property. A house, used as an office, and several trailer spaces are on the property. The Union Pacific Railroad passes a few hundred feet from the property, but recent lack of use of this railroad suggests it may not be immediately available.

Heavy duty power lines also cross within a mile of the property and power lines have been run in to several places on the property, including the portal of the Vivian Tunnel, and the house near the center of the property. Water is made in small volumes in underground adits, but a water development plan has not been developed as yet. It is interesting to note that one of the holes drilled by Phelps Dodge, on the north-eastern extremity of the property, is said to contain hot water.

Contact Cafe is located immediately adjacent to the property and phones have been connected to the house on the property as well as Contact Cafe.

Jackpot, Nevada, is about 16 miles north on the paved highway and contains several motels, gas stations, and a grocery store; as well as excellent recreational activity, a small airport, and a golf course.

Twin Falls, Idaho, and Elko, Nevada, are main supply and transportation centers.

Improvements

The Contact Mine has been improved by about 4 million dollars worth of recent drilling, geological exploration, and development work.

An additional improvement of significance is the 2,300 foot Helen B. Smith adit which develops the westerly extension of the property.

Various buildings, including a house which is used as an office, and a domestic water system, are serviceable.

Three hundred ten feet of existing tunnel on the Vivian Tunnel project is presently being prepared for rehabilitation. A contract is then to be let for a first initial 400 feet of tunneling to extend the Vivian Tunnel.

As the tunnel proceeds through the ore zones, it will block additional ore for immediate mining.

Geology

The Contact ore that has been explored is copper - silver type in quartz veins that are associated with the peripheral zone of a granodiorite batholith, intruded into meta-sediments.

According to reports by Mr. L. K. Requa (1970 and 1972) copper - silver ore is found in three types of occurrences; namely (1) fissure quartz veins, (2) "porphyry copper" type replacement accumulations, and (3) contact metamorphic deposits.

Past exploration and mining have been directed primarily at developing the mineralized quartz veins in the "Banner Zone" that contain copper and silver. These veins dip, on the average, about 60° southerly.

In this Banner Zone alone, to a depth of about 1,000 feet, Requa indicates that Coralta Resources developed about 5,000,000 tons of proven quartz vein type ore with an average grade of about 2.30% copper equivalent, primarily copper and silver. The width of the quartz veins varies between about 7 feet and 20 feet. In addition Requa indicates about 2,800,000 tons of probable ore calculated to 300 feet beyond proven ore limits.

Requa qualifies the above calculations by indicating:

1. Proven ore figures can be considered as acceptable.
2. Probable ore calculations are reasonable but some

refinement may be necessary. The figure presented, however, can be accepted as a reasonable estimate.

3. No calculation was made for possible ore.

4. That a large tonnage (± 50,000,000 tons) of possible ore (vein wall rock) with an average grade of about 0.5% copper equivalent has not been given any consideration at this time.

5. Lateral limits to the main vein system have not been established.

The recent "deep-hole" Phelps Dodge drilling, consisting of 5 drill holes in the general ore zone area (see geologic map) drilled to an average vertical depth (see map) of about 2,700 feet, adds a substantial tonnage of proven ore to the total, + 2,500,000 tons.

I tentatively refer to this tonnage of ore as the P.D. Zone, and is an addition to the Banner Zone.

In the deeper extensions of the veins, cut by Phelps Dodge drilling, the grade is at least as good as the previous figures for more shallow ore (Banner Zone). In one hole, PD-4, grades of ore ran as high as 20% copper.

The undrilled zone between PD-10, PD-12 and PD-14 also has strong potential ore relative to the Banner Zone and zone PD-10 - PD-12 (possibly + 5,500,000 tons).

SUMMARY OF VEIN TYPE - HIGHER GRADE ORE RESERVES

	Average Width	Copper Equivalent Grade	Tons
Proven			
Vein type high grade From Requa & Chatin 1971 report	14'	2.3%+	5,000,000
Vein type high grade From Humphrey (P.D. holes) 1977	7' to 20'	2.3%±	2,500,000
Probable			
From Requa & Chatin		2.3%+	2,500,000
From Humphrey (P.D. holes) 1977		2.3%±	5,500,000
From Humphrey extension "Banner Zone" 3,000 ft. easterly 1977		2.3%±	12,000,000
Proven and Probable Vein Type Ore			
TOTAL	7' to 20'	2.3%±	27,500,000

FIGURE 1: VEIN TYPE HIGHER GRADE ORE RESERVES

LOW GRADE DISSEMINATED TYPE

	Width	Copper Grade	Tons
Probable			
From Chatin & Requa, 1970	150'	.5%	74,000,000
From Humphrey, 1977	50' to 100'	.3% to .75%	76,000,000
Tonnage Low Grade			
TOTAL	50' to 150'	.3% to .75%	150,000,000

Note: The low grade zones are zones of hydrothermal alteration, containing the higher grade vein type mineralization. These zones of alteration, according to available data, are in the range of 50 to 150 feet wide.

FIGURE 2: DISSEMINATED TYPE LOWER GRADE ORE RESERVES

The deep extension of the veins sampled ("exposed") by drilling indicates that the average width and value of the veins is at least equal to that in the near surface zone.

Some intervals (zones) in the cores of the deep P.D. holes indicate a vein width in the range of 20 to 40 feet, and the grade appears to be a little higher, on the average, than the near surface ore (possible leaching of some of the near surface ore).

Thus, at the present time, without additional drilling, there are in the range of (at least) 7,500,000 tons of vein type proven ore that will probably average + 2.30% copper equivalent; and the limit of the ore zone is not yet determined - for instance, the easterly extension of the Banner Vein Zone beyond the above discussed "proven" zone, through the Palo Alto and Blue Bird claims. Some rich near surface ore was mined from these claims in the early period of mining, but to my knowledge there has been no drilling on these claims. This easterly extension of the Banner Ore Zone may add another large potential ore body to the system (12,000,000 tons tenatively assigned).

Three or four drill holes to a depth of 400 to 800 feet to cut the projection of the ore zone within the limits of the Palo Alto - Blue Bird claims is a very practical and

cheap means of adding a probable large, easily available, ore tonnage to the already several million tons of proven ore in the Banner Zone proper and the P.D. Zone. The extension of the Vivian adit will also develop this area.

This easterly ore extension may be mined as a part of the Banner Zone proper, using the same underground drives and equipment.

In addition to the proven vein type ore in the general Banner area there are zones within the drill-explored areas, or volumes, of hydrothermally altered "disseminated type" mineralized rock in both the footwall zone and the hanging wall zone of the principal veins (potential ore zones).

These potential ore zones could be explored while the mining of the veins is underway.

As examples of potential ore zones, in drill hole log PD-4, between 1,580 to 1,710 feet (130 feet) we find, described in the drill log "hydrothermal type alteration with disseminated copper values". In this case, however, the copper is present only in the range of 0.10 to 0.30% copper. (Note there are no geological logs of the Banner drill hole cores.)

There are other described zones of hydrothermal alteration in the logs of the P.D. drill holes, usually in the wall rock of the quartz veins, that are 50 to 100 feet wide that carry probable ore grade rock.

Thus we have an encouraging prospective lead to large zones of hydrothermally altered ore rock, either associated with vein deposits, or separate.

Since we now know that hydrothermal alteration of vein wall rock, and non wall rock as well, has occurred, with contained possible "ore" grade zones of non vein type, we should examine available cores of both P.D. and Banner Zone drill holes. We may then begin to map and study the hydrothermal alteration - ore mineralization potential.

This potential appears to be enormous but not yet completely understood geologically.

We have not yet mapped and sampled the H. B. Smith adit some 2 to 3 miles west of the Banner Zone. The portal is caved.

We know, from maps of the 1920 era, that there are a number of assaying vein type zones within the last 1,000 feet of the adit that carry "good grade" ore values.

From reports by the Gray Mining Company, "Five bodies of ore were cut in the tunnel, all of commercial grade with values ranging up to 7 percent copper in chalcopyrite and bornite, to 0.90 ounces of gold and to 3.0 ounces of silver per ton".

When accessible we should map and sample this adit. We should also map and sample the surface outcrops of the H. B. Smith veins. Any ore developed in the Helen B. Smith tunnel would add to the already developed reserves.

In Situ Leaching Potential

Ore values in the wider low grade range may lend themselves to in situ leaching. Although in a few places the ore is in contact with limestone, most of the mineralized rock is isolated in granodiorite. This would make good potential leaching rock.

As the ore zone is explored by the Vivian Tunnel project, and when mining commences, the low grade zones can be examined and prepared for in situ leaching, and in situ leaching can commence.

An engineering plan should be started to evaluate this potential.

In Ely, Nevada, the in situ leaching project in the Kimbley Pit area is highly advanced, and is a most profitable portion of their operation on ores not considered economic for mining.

Water injections by high pressure pumping, sometimes called hydro fracturing, is a new development which coupled with the leaching process itself should be considered.

Vivian Tunnel Plan

The Vivian Tunnel was first proposed by Gray in the early 1910 - 1920's and was commenced on the Bobs claim trending on a westerly course.

Careful examination of the old workings in other areas and consideration of all variables suggests this site with its existing 310 feet of usable adit is still a good site for a tunnel into the ore zone.

The tunnel will serve several goals.

As the tunnel progresses it will develop zones of ore trending toward the tunnel from the surface outcropping and drilled out areas on the property.

It will be an initial production level adit.

It will explore the easterly extension of the Banner Zone and the easterly projection of the surface outcroppings of the Bryan claim.

It will also be low enough in elevation to mine ore under the Blue Bird Zone.

Mining can proceed off the tunnel level and inclines can be run on mineralized structures as necessary to develop additional backs.

Additional openings to the surface will be necessary as production increases, and the tunnel will supplement these other access routes.

The tunnel will drain itself, and drain into the area of the mill site near the tunnel portal.

Assessment work can proceed with the tunnel in a stop-and-go fashion during periods when a lot of work is not programmed, thus it would not flood with every cessation of work.

An incline shaft nearer the developed ore would not meet all the criteria above noted, and therefore, the tunnel was considered as a good alternative, all things considered. If an incline is later decided to supplement the Vivian adit, this would be all to the good in complementing that development.

Conclusion

I have worked on and studied the veins in Grass Valley, California, which are considered to be among the most persistent veins in the world. The individual Contact veins are more persistent, and are remarkable in their continuity.

The work of placing the property into production should be commenced, because there is now a large proven, partly developed, ore body.

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