

RENO GOLD MINES LIMITED

[NON-PERSONAL LIABILITY]

CENTRAL ZEBALLOS MINE ZEBALLOS, B.C.

Notes of Preliminary Examination of the

C. D. MINE, formerly known as the REY ORO MINE

LOCATION: About six miles northeast of Zeballos. Reached by road to Central mine, thence over $1\frac{1}{2}$ miles of steep tractor road.

PROPERTY: There is one mineral claim and three fractions, the Lone Star, J. & E. Fr., K Fr., and Axe Fr. They are owned by the C. D. Mining Co., Denton, manager. Gold Creek runs through the center of the property.

GENERAL: Good timber and good water are plentiful. Elevation at the camp and tunnel is about 1250 feet; the topography is exceptionally smooth and flat for the district.

EQUIPMENT: There are numerous camp buildings, sufficient to care for thirty or forty men, constructed of shakes or logs. There is an iron covered powerhouse in which there are: -

- 1 350 ft. Gardner Denver compressor, driven by
- 1 Hercules oil engine (slightly too small)
- 1 140 ft. Broom-Wade compressor driven by
- 1 Ford auto engine

The steel sharpening is done with an oil furnace and a small Sullivan drill sharpener. There is also a small gasoline driven ventilating blower.

In the mine there is an Ingersoll Rand air hoist with skip, cars, track, air drills etc.

GEOLOGY: The veins are of the usual Zeballos type, occurring in granodiorite and striking northeast. There are a few dikes, probably related to the so called aplites of the district, but more basic in character.

DEVELOPMENT:

Main Tunnel -	
Tunnel level, drift on vein	685 ft.
" " crosscuts	350
50 ft. level drift on vein	210
100 ft level " " "	400
Winze below tunnel level	125
Three short tunnels on various veins	125
	<u>1895 ft.</u>

All known ore above the 50 ft. Level has been stoped out. 3360 Sq. Ft. of ore has been taken out between the 100 ft. level and the 50 ft level.

MAIN VEIN: On the creek bank near the portal of the main tunnel there are three strands of vein which are thought to join at about 60 feet in the tunnel. Thence for 200 ft. northeast continuous ore has been stoped; then follows 40 ft. of low grade vein, followed by 160 feet of marginal ore. In the remaining 225 ft. of the tunnel the vein becomes increasingly lean and narrow, dwindling to a mere crack at the northeast face. The strike is about N 50° E and the dip 80° southeast.

All but 40 ft. of the 50 Ft. Level is in ore. The southeast face shows two inches of gouge and low grade material; near the face several gouge seams diverge from the vein at about 30° to the westward.

On the 100 Ft. Level 130 feet of ore (partly stoped) occurs in the southwest drift. The face of this drift is similar to that of the 50 Ft. Level. In the northeast drift 40 feet of high grade ore was found, beginning 15 feet east of the winze. This has been stoped 30 feet high, where the values are weakening. From this point to the face of the drift, 140 feet, the vein becomes increasingly lean and narrow and is a mere seam at the face.

In general the vein varies from 1 inch to 4 inches in width, and consists of gouge and rather scanty quartz, both of which, in the ore zones, are heavily mineralized with pyrite, sphalerite, arsenopyrite and a little galena.

OTHER VEINS: No. 1 Vein. This vein outcrops in the creek 200 ft. northwest of the main tunnel; this is reported to be a good showing but is covered at present. It could be cut by a 100 ft. extension of the northwest crosscut in the main tunnel.

McDonald vein: This vein is exposed in an open cut 700 feet northeast of the main tunnel portal. It is a strong fissure and shear with 1 to 2 inches of quartz with weak pyrite and arsenopyrite and some gouge. An aplitic dike is along the footwall at the lower part of the cut. What is probably this vein has been cut in the southeast crosscut from the main tunnel at 100 feet from the main vein. On the surface the strike is N 55° E and the dip 70° NW; in the crosscut it is nearly vertical and consists of a six foot shear in which there are several strands of gouge with narrow quartz, but weak sulphide mineralization. A sample of the best quartz from the open cut, over a width of 0.3 ft. assays 6.68 Oz. Gold.

Other veins of apparently less importance have been found in the northwest crosscut (two 4 ft. apart) at 50 feet from the main vein and about parallel to it. They are chiefly gouge seams and barren appearing. At the face of the NW crosscut at 75 feet from the main vein there is a four inch vein striking parallel to the main vein and dipping 75° SE. It appears barren.

A short tunnel has been driven on a barren vein 275 feet SE of the main tunnel portal. It strikes N 70° E. and is nearly vertical.

About the center of the J. & E. Fr. there are two open cuts on a narrow vein striking N 50° E and dipping 80° NW. A little lead, zinc, and pyrite show in a $\frac{1}{2}$ inch quartz seam but are said to show low assays.

PRODUCTION: The production of the Rey Ore Company is estimated at \$80,000 gross, which was taken from 21,180 Sq. Ft. of stopes and drifts, or \$3.78 was taken from each square foot of area. This covers all ore ~~above~~ on and above the 50 ft. Level.

Production by the C. D. Company has been from between the 100 ft. and the 50 ft. levels, and has amounted to 471,559 Oz. gold, which, figured at \$38.50 per Oz. is \$18,155. The last shipment, on which returns have not yet been received, is estimated to contain \$5,000, making the total production from this section \$23,155, from a total area of 3360 Sq. Ft., or \$6.89 per square foot.

Total production to date is approximately \$103,000. The tonnage is uncertain but is likely around 500 tons of sorted ore at about \$200 per ton.

If figured back to shrinkage stoping to a width of 3 feet original Rey Ore production would have been 5300 tons at 0.39 Oz. per ton, and C. D. production 840 tons at 0.72 Oz per ton, or for the mine to date 6140 tons at 0.436 Oz. per ton.

ORE DEVELOPED: On a shrinkage stoping basis there should be about 1000 tons of 0.70 Oz. ore remaining between the 100 and the 50 levels. It is reasonable to expect about 40 tons of ore, stoped 3 feet wide, per foot of depth over a reasonable amount of further sinking.

Rough figures indicate a profit of about \$55,000 per 100 foot level over and above development, provided the oreshoot continues its present length, width, and value.

PROPOSED DEVELOPMENT and EXPLORATION: Aside from continued development of the known oreshoot to further depth, there are several veins which seem to justify some exploration, - especially the McDonald vein and the No. 1 vein; also some exploration of the main vein across the creek to the southwest should be done on the 100 ft. Level.

The following work is therefore proposed:-

100 ft. Level; drift southwest on main vein 200 feet	200 ft.
Tunnel level; crosscut an estimated 100 ft. to the McDonald vein from face of tunnel	100
Drift on McDonald vein at least	150
Crosscut NW in present NW crosscut to cut the No. 1 vein estimated at	100
Drift on No. 1 vein at least	150 ft
Total exploratory work	700 ft
Cost at \$18 per foot	\$12,600

CONCLUSION: I see no evidence to indicate any special change in the oreshoot to a reasonable further depth, though it would be dangerous to assume any large extension downward.

At the north end of the main tunnel the vein gives every indication of dying out. It is possible however that it might

open up again, or that there is a parallel en echelon structure, as is not uncommon in the district.

At the south end of the main tunnel the vein is moderately strong although low grade; there are a number of east-west gouge seams diverging from it to the west. There seems a moderately good chance of a considerable extension of the vein to the southwest with the possibility of another creshoot.

Both the McDonald and the No. 1 veins are strong and in view of the experience on the Main vein they justify some exploration.

On the whole the C. D. property is moderately attractive as a development proposition, but only under easy price and terms, and with time for a certain amount of exploration before any payments are made.

SAMPLES: A few specimen samples, only, were taken, as follows:-
Selected quartz from McDonald cut 0.3 ft. wide 0.08 Oz. Au.
Floor of 100 ft. Level at sump 15' NE of winze, .15' 23.22 Oz.
High grade specimen from 100 ft level stope, soft, 10.56 Oz.

Respectfully submitted,

Chas. C. Starr
August 15, 1940.