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RECONNAISSANCE EXAMINATION
ON CLAIMS OF
BELMONT COPPER MINING COMPANY
SUPERIOR, PINAL COUNTY, ARIZONA

FOR THE

INSPIRATION CONSOLIDATED COPPER CO.

BY

ROLAND B. MULCHAY

MARCH - 1936

RECONNAISSANCE EXAMINATION

ON CLAIMS OF

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INTRODUCTION

A considerable production of oxidized gold-silver ores containing some copper has been made from claims owned by the Belmont Copper Mining Company during the past three years. This ore has been extracted by leasers and shipped in large part to the Magma Smelter at Superior. In an attempt to interest outside capital in a company operation of the property, Mr. Hugh R. Daggs of Phoenix, Arizona, brought the claims to the attention of Mr. T. H. O'Brien of Inspiration, Arizona.

The Belmont Copper Mining Company is capitalized for 2,500,000 shares, par $1.00, of which approximately 1,500,000 shares have been issued. The company is reported by Mr. Daggs to have no outstanding indebtedness; controlling interest in the company is held by a Mr. Alexander McKay.

A reconnaissance examination of the Belmont claims was made March 2 and 3, 1936, to determine the advisability of a complete examination of the property. In the short time spent at the claims no sampling or geologic mapping was done.

LOCATION, PHYSICAL FEATURES.

The claims are located one to two miles southerly from the town of Superior, Pinal County, Arizona. The property includes claims formerly held as the North Group of the Consolidated Holding and Trust Company, and the Grand Pacific Copper Company, and aggregates 145 claims of which 27 are patented. The claims extend westward from the crest of Apache Leap into the valley which extends southerly from Superior parallel to the Superior-Ray road. A narrow, rough road two miles in length joins the mine with the Superior-Ray road at a point about two miles south of Superior.

There is no timber available in the district. The 700 level of the mine makes considerable water which is sold to the Arizona Edison Company for a domestic water supply for the town of Superior.

HISTORY AND PRODUCTION.

In early 1925 the Belmont Company commenced an intensive development campaign in an attempt to discover a copper mine similar to the Magma Mine by deep level development of mineralization exposed on the surface at the property. A shaft had been driven to the 700 level by former operators of the property and some lateral development had been done on the 500 and 700 levels.

The development campaign was directed by Mr. Ira B. Joralemon, consulting geologist of San Francisco, Cal-

ifornia. The main shaft was driven to the 16th level; extensive drifting, crosscutting and diamond drilling was done on the 1000, 1150 and 1400 levels and a small amount on the 1600. The work was not successful in finding commercial copper ore bodies and the development campaign was stopped. A few cars of oxide copper ore were shipped from stopes below the 140 tunnel level, but this production was unimportant.

During the past three years net smelter returns from gold silver ores produced by leasers from near surface workings on oxide mineralization in limestone amounted to $119,860. The annual report of the Belmont Company for 1935 gives the following production figures:

Year	Tons	Ozs. Silver	Ozs. Gold	Lbs. Copper
1933	800	21,051	445.8	9,989
1934	3,484	50,988	1,112.4	35,874
1935	4,760	50,315	1,030.9	34,916
Total	9,044	122,354	2,589.1	80,779

At present ore is being produced from three separate leases, and there is intermittent activity at two others. Production varies from 300 to 500 tons per month. The Charles Smith lease on the Monte Carlo claim is the largest producer; other active leases are the Eureka on the Monte Carlo claim and the Belmont lease on the claim of that name.

Equipment owned by the Belmont Company is utilized by the leasers. Electric power is supplied over a line from Superior. Ore from the various leases is transported to the end of the truck road at the main shaft by burros.

GENERAL GEOLOGY.

The rocks exposed on the Belmont property consist of diabase, which is intrusive into the lower part of a series of Paleozoic sediments; this series is composed of quartzites and limestones, with a general Northwest strike and Northeast dip, which are in turn capped by dacite which forms the steep cliffs that make up Apache Leap. No mineralization is found in the dacite, and the strongest outcrops on the property are found in limestones which are probably a part of the lower Carboniferous beds.

From a short examination of the workings at the active and inactive leases it appears that the ore deposits recently mined have been localized at the intersections of northeast striking, well mineralized fractures with favorable limestone beds. Leases on the Panic claim, the North lease, the West lease, the Black Hole lease, the Charles Smith lease, and the Belmont lease, which contains good oxide copper mineralization, are on this type of deposit. The Eureka lease is along

a fault structure which strikes N 75° E and dips flatly to the south. Mineralization in this lease is composed of oxide copper minerals deposited in a crushed zone along the fault; whether this mineralization was originally deposited along this zone or whether it has been transported to its present position by surface waters is unknown.

Mineralization at the other leases is composed of strong iron and manganese oxides, varying amounts of quartz, some copper oxide minerals, some cerrusite, occasional free gold, and native silver, prominent cerargyrite and other silver minerals. In the higher grade sections there is considerable lead molybdate or wulfenite.

RELATION OF DEVELOPMENT WORK DONE TO THE GEOLOGY OF THE AREA.

Prior to the operation of the property by the Belmont Company a main shaft had been sunk below the 700 level, and some development work on mineralized fractures in the lower Paleozoic sediments had been done. No commercial orebodies were discovered though scattered bunches of galena and sphalerite are reported to have been found in drifting on the 500 level.

The extensive development work done on the levels below the 700 was mainly in diabase, and included blocks of the lower Paleozoic sediments. In no case did

this work proceed easterly far enough to bring the development into the Carboniferous limestone horizons in which the strongest outcrops occur at the surface. Thus, there is no clue as to the extension with depth of these deposits which are now worked by leasers. The 140 tunnel level exposes scattered sections of a well mineralized structure known as the Gibson Vein but within sediments lower than the horizon in which the principal gold-silver oreshoots have been found.

There is little available assay information, and the shipments form the most reliable measure of the contained value of the ore. No sampling for gold or silver has been done in the mineralized areas prospected on the 140 tunnel level.

In the Lake Superior and Arizona Mine near the town of Superior ore deposits reported to be in similar rocks and of similar mineralogy persisted to a depth of at least 1800 feet along the dip of the limestones, and contained fair grade gold, silver and copper values. There appears to be no reason to expect that the mineralization in the limestones at the Belmont will not persist to considerable depths though no prediction can be made regarding the precious metal content.

CONCLUSION.

At the Belmont property extensive prospecting for copper orebodies in lower Paleozoic sediments, and a

large diabase intrusive which invades this part of the Paleozoic series, was not successful. Outcrops of strong oxide mineralization in Carboniferous limestones have been mined from the surface during the past three years, and a considerable production of gold-silver ores has resulted. While there has been no development work on the downward projection of these deposits in the limestones below the 140 tunnel level, there is no reason to believe that this mineralization will not persist to considerable depths.

The strength of the mineralization exposed in the Belmont leases, the favorable operating conditions and the proximity to a smelter make the showing at the property an attractive one. Extensive geologic mapping and sampling of the surface and accessible underground workings is therefore justified.

Respectfully submitted,

Roland B. Mulchay

March 26, 1936
Inspiration, Ariz.