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UNITED NEWMONT MINES LTD. (N.P.L.)

BRENDA LAKE AREA, BRITISH COLUMBIA

by

Allan P. Fawley

Report Written June 1966

UNITED NEWMONT MINES LTD.,
BRENDA LAKE AREA, BRITISH COLUMBIA

INTRODUCTION

The recent discovery of large reserves of copper-molybdenum ore at Brenda Mines, in the Okanagan District of British Columbia, combined with the present high prices of copper and molybdenum have greatly spurred the search throughout the area for other copper-molybdenum deposits. United Newmont Mines Ltd. hold three large groups of mineral claims and as much of the claims area is geologically favourable for copper and molybdenum deposits and is in the same general locality as the large Brenda Mines deposit, a careful and detailed prospecting and exploration campaign is warranted for the property.

This report is based on several personal examinations of the Peachland-Brenda Lake area during April and June 1966; on some private reports and maps; on Geological Survey of Canada Map 15-1961 by H. W. Little; and on Geological Survey of Canada Memoir 243 by H. M. A. Rice (1960).

LOCATION AND ACCESS

The claims of United Newmont Mines are in three groups, which for this report are called the Eastern, Central and Western Groups. The three groups are all in the Okanagan section of British Columbia; The Eastern Group is beside Greata Creek about 8 miles northwest of Peachland

and 7 miles southeast of Brenda Mines; the Central Group is north of Trout Creek, about 15 miles east of Peachland and 6 miles southwest of Brenda Mines; while the Western Group is on Galena Creek, about 23 miles east of Peachland. Access is by paved highway from Vancouver to Peachland and thence by gravel and dirt roads to the three groups of claims; an alternative route from Vancouver for the Western Group is via Princeton and the Kettle Valley.

PROPERTY

United Newmont Mines Ltd. hold 169 mineral claims in the Osoyoos and ^{SIMILKAMEEN}~~Kamloops~~ Mining Divisions of British Columbia. The claim names and numbers are as follows:

Bornite 1	- Bornite 15
H.D.C. 1	- H.D.C. 20
Lode 1	- Lode 18 and Lode 20
Rusty 1	- Rusty 10
Cupric 1	- Cupric 2
Brenda Lee 1	- Brenda Lee 69
Doe 1	- Doe 14
Lid 1	- Lid 4
Gayle 1	- Gayle 16

The claims are at an elevation of from about 2,500 to 5,500 feet above sea level.

CLIMATE AND TOPOGRAPHY

The property lies within the "dry belt" of British Columbia where the summers are generally hot and the winters are moderate, and where the rainfall is only about 10-11 inches per year. The claims are in quite

rugged country and most of the area is covered by overburden.

HISTORY

The Peachland-Brenda Lake area has been prospected many times but a covering of glacial overburden over most of the area made ordinary prospecting methods difficult and unsatisfactory. Recently geochemical and geophysical (induced polarization) surveys have been found to be successful exploration methods at Brenda Mines (where they have been confirmed by drilling) and these methods along with trenching by bulldozer are becoming common in the area. However, as far as is known, methodical geochemical and geophysical exploration programs have not been undertaken on the claims of United Newmont Mines.

GENERAL GEOLOGY AND ORE POSSIBILITIES

The claim groups of United Newmont Mines Ltd. mostly overlie granodiorite or other granitic type rocks of the Coast Intrusions. The Eastern claim group also overlies volcanic rocks; and granite and granodiorite of Cretaceous or Tertiary age intrudes the older granitic rocks of the Coast Intrusions near the Central and Western claim groups.

Economic mineralization at the nearby property of Brenda Mines Limited consists largely of chalcopyrite and molybdenite coating fractures within granodiorite. The tonnage estimates for Brenda Mines has increased from 14 million tons in December 1965, to 86 million tons (Financial Record, April 18, 1966) with the grade remaining approximately the same (reported as 0.24 percent copper and 0.078 percent

molybdenum, Northern Miner, May 19, 1966) and there is every expectation that the tonnage will be further increased. The grade is low but large-scale open-pit mining of the property at the present prices for copper and molybdenum should yield a handsome profit.

The claims of United Newmont Mines overlie similar geological formations to those at Brenda Mines and as they are in the same general area, similar copper-molybdenum deposits may occur. Lead and zinc mineralization, with associated silver values, is also known in parts of the area and hence exploration should not be restricted to copper and molybdenum.

CONCLUSIONS AND RECOMMENDATIONS

The three large groups of claims held by United Newmont Mines Limited are in the same general area as the property of Brenda Mines where a very large tonnage of copper-molybdenum ore has been discovered, and as the geology is similar there may also be a similar large copper-molybdenum deposit on the claims of United Newmont Mines. Also lead and zinc mineralization has been found in the area. Hence a careful and detailed prospecting and exploration program is warranted for copper, molybdenum, lead and zinc mineralization and should be undertaken along the following lines:

1. Establish a base camp on the property. A trailer camp or combination trailer-tent camp would be best so that the camp can readily be moved from one group of claims to another.

2. Due to overstaking in this area, conduct a rough survey of the two claim groups so that their boundaries are definitely located.
3. Have a preliminary geological and geochemical survey carried out over the entire property. The British Columbia Surveys and Mapping Branch interim maps, on a scale of 1 inch to 1/4 mile, will be very useful for the preliminary mapping. Trenching, using a bulldozer, may be of great assistance to the geological mapping and may also aid in finding and sampling mineralized zones.
4. Complete a detailed geological, geochemical and magnetometer survey over any claims where geochemical anomalies are found during the preliminary survey or where copper, molybdenum, lead or zinc showings are found.
5. Conduct I.P. (induced polarizations) geophysical surveys over anomalies outlined in paragraph 4 above.
6. Drill any I.P. anomalies that are discovered of possible economic size. For drilling, use either diamond or overburden drills depending on the topography and type of anomaly discovered. Trenching, using a heavy bulldozer, may be more economical and also yield more accurate sampling results than drilling on some sections of the property.

ESTIMATED EXPLORATION EXPENSES

The cost of an exploration program is difficult to estimate for the large number of claims owned by United Newmont Mines Limited as the total cost will be dependent on the results of the preliminary exploration program. A suggested program is one to be undertaken in three stages, each stage to be completed and satisfactory results to be obtained prior to proceeding with the next stage.

Stage I

The first stage should include preliminary and detailed geological, geochemical and magnetometer surveys, claim surveying and probably some trenching (the first four recommendations in the preceding section). This stage will require a crew of about 5 men (including a geologist) and a rough estimate of the cost per man (including wages, board, equipment, supplies, etc.) is \$1,000.00 per month, so that a five-man crew will cost about \$5,000.00 per month, or \$20,000.00 for the remainder of this season; and the cost of administration, travel expenses, consulting fees, geochemical and other assays, bulldozer rental, etc. will probably be at least \$10,000.00. Hence \$30,000.00 should be available for the first stage of exploration.

Stage II

Mineralized areas and geochemical anomalies found during Stage I should be tested by an I.P. (induced polarization) geophysical survey which will indicate the extent and depth of possible zones of mineralization. I.P. geophysical surveys are, unfortunately, expensive and even for a

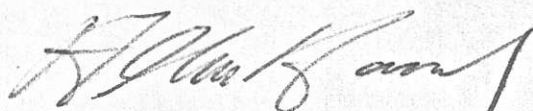
large program will cost about \$400.00 per line mile (including the cost of report and interpretation, and the cost of mobilizing the equipment to the area, but not including the cost of line cutting). To cover the entire 169 claims of United Newmont Mines by an I.P. geophysical survey along lines at 400 ft. intervals would cost well over \$50,000.00, but by carefully selecting the line locations on geological grounds and on geochemical and magnetometer surveys, the line miles of I.P. surveying can be greatly reduced. However, a reserve for line cutting and I.P. surveying should be available of about ... \$20,000.00

Stage III

If results of the I.P. surveys are encouraging then a large scale program of development will be warranted which will necessitate enlarging the camp, building trails, trenching and diamond drilling. A rough estimate of the cost of this stage including assays, engineering and administrative costs, etc. is ... \$50,000.00

Hence a total of \$100,000.00 is required to ensure that adequate funds are available to complete the three stages of the recommended program.

Respectfully submitted,



Allan P. Fawley, B.A. Sc.,
M. Sc., Ph. D., P. Eng.

Vancouver, B.C.

June 27, 1966

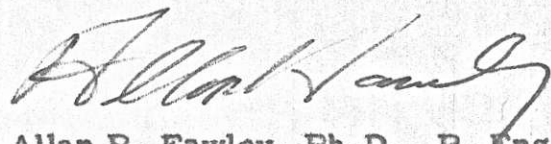
Consulting Mining and Geological
Engineer

CERTIFICATE

I, ALLAN PRIEST FAWLEY, of the City of Vancouver, in the Province of British Columbia, HEREBY CERTIFY:

1. THAT I am a Consulting Mining Engineer and Geologist, and my address is 1947 West King Edward Avenue, Vancouver 9, B.C.
2. THAT I am a graduate of the University of British Columbia with the degree of B.A. Sc. (1937) in Mining Engineering, of Queen's University with the degree of M.Sc. (1946) in Geology, and of the University of California with the degree of Ph. D. (1948) in Geology.
3. THAT I am a registered Professional Engineer in the Province of British Columbia and in the Yukon Territory, and also a member of the Society of Economic Geologists, of the Canadian Institute of Mining and Metallurgy, and of the Geochemical Society.
4. THAT I have practised my profession as a geologist for more than twenty years.
5. THAT I have no direct interest or indirect interest, nor do I expect to have any interest in United Newmont Mines Ltd. (N.P.L.).
6. THAT I have no direct or indirect interest in any company acquiring control or intending to acquire control of United Newmont Mines Ltd. (N.P.L.).
7. THAT this report on the property of United Newmont Mines Ltd. (N.P.L.) is based on several personal examinations of the Peachland-Brenda Lake area during April and June 1966.

DATED this 27th day of June, 1966



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