CRAIGNONT - (BIRKETT CREEK MINE OPERATORS LTD.)

(50° 120° SW)

010471

This property owned by Craigmont Mines Limited, Head Office, 678 Howe Street, Vancouver 1, B. C., comprises 157 claims and fractions, staked from December 1954 to 1957, and 20 claims and fractions staked in 1957 - 1958. The main some of mineralisation is on the Merrell 7 and 8, and McLeod 5 and 6 claims between 3,800 and 4,200 elevation on the east slope of Promontory Hill about 10 miles northwest of Merritt, B. C. In May - June, a location survey was carried out by B. C. Land Surveyors on 64 claims and fractions and a legal survey on fourteen key claims and fractions. Application for lease has been made on the latter fourteen.

From November 1957 to June 1958, Canadian Exploration Ltd. directed all exploration on the property. In July 1958 responsibility for all exploration and underground development was assumed by Birkett Creek Mine Operators Ltd., Head Office, 700 Burrard Building, Vancouver 5, B. C., a private 100 share company, formed in July 1958, of which Canadian Exploration Ltd. holds 30 voting shares, Noranda Mines Ltd. 15 voting shares, Peerless Oil and Gas Ltd. 15 voting shares and Craigment Mines Ltd. 40 non-voting shares.

Rock exposures in the southern part of the claims are poor and work has been concentrated on a large magnetic anomaly in an area davoid of outerop. The contact between the dicritic rocks of the main mass of the Ouichon batholith, which underlies

all the northern Graigmont claims, and the Micola series rocks roughly follows the north fork of Birkett Creek in location and strike. The ore body lies just south of the morth fork of Birkett Greek, in the Micola Series rocks and appears to be a pyrometa somatic replacement of a faulted and partly breceiated limey tuff stratum in the Micola Series. Wall rocks are greywacke and quartso feldspathic tuff on the north, and an eastwest striking dyke of diorite on the south in the east portion of the ore sone and andesite, quartso feldspathic tuff and possibly limey tuff on the south in the western portion. Alteration is common in all the rocks, but most prominent in the limey stratum where chlorite, epidote, orthoclase and garnetiferous skarn have been produced.

The ore some maintains a fairly regular strike averaging 5 80° W throughout its drilled length and dips steeply south to nearly vertical in the upper portions. Some indication of a reversal of dip of the ore some at depth has been obtained from surface drilling. Apparently continuous mineralization has been traced by surface drilling for a length of 1750° and true widths to over 200°.

Mineralization is magnetic, specular hematite, or both, with masses, irregular veinlets and disseminations of chalcopyrite. Pyrite is almost absent in the drill holes in the ore some except in one hole and bornite is rare, although present.

Reserves of probable ore in the 13 to 14 million ton range grading approximately 1.8% copper and 17% iron have been quoted by both the operators and Craigmont's consultants, based on surface drilling and geological interpretation only.

Depth and lateral extent of the ore some are yet to be determined.

Contract surface drilling continued from November 1957 to December 1958 with a program varying from one drill on three shifts to a maximum of four drills working continuously in June. Twenty-two surface holes, both inclined and vertical, totalling 15,404° were diamond drilled on the main zone and of these, 16 holes cut the ore zone, one was bandoned hangingwall rocks, two were abandoned in footwall rocks, two were entirely in footwall rocks, and one was bandoned due to drilling difficulties at the base of the overburden.

From December 1957 to May 1958 intermittent rotary drilling completed twenty-five holes through overburden to bedrock, totalling 1392° as preparation for later diamond drilling. Approximately 2000° of bulldoser stripping was done in five separate areas and approximately ten miles of access roads were built on the claims. Ground magnetometer surveys were filed for assessment work on 62 claims and fractions and some surface geological mapping was completed.

During the surface exploration phase a crew ranging from 15 to 35 men, including drill contractors and technical personnel were employed. A tent camp for 18 men was set up in May for the use of the diamond drillers and was closed on termination of surface drilling in Movember.

The underground exploration phase began in July 1958. With the assistance of the Department of Mines a new road with a five percent grade, 4.2 miles long was built from the Aberdeen Road to the 3500 elevation and the Aberdeen Road was widened and improved from the Merritt-Spences Bridge highway to the turnoff.

By year end a complete plant for the underground exploration phase had been set up, including dry house, temporary offices, warehouse, corehouse, combined shops and power plant, ore treatle water system with water tank, and all necessary equipment was installed, including one Ingersoll Rand 500 cfm, and two LeRoi 500 cfm displacement compressors, a D1300 model, 75 kW caterpillar Diesel generator set and a D13000 59 kWA Caterpillar Diesel standby generator.

The 3500 adit, 9° x 9° and later 9° high by 8° wide inside timber, was collared in a large open cut at 3516 elevation on the south side at the north fork of Birkett Creek. Drilling is done with an Ingersoll Rand ABJ 3 boom Jumbo mounting 3 DA35 Ingersoll Rand Machines on 12° shells using 1 1/4" round steel and 1 3/4" Tungbide bits. An Eimoo 21D rocker loader mucks into 91 ou. ft. Granby type cars hauled by a Mancha 6 ton CM diesel driven locomotive and a Ruth 3 ton Buda diesel driven standby locomotive on 24" gauge 40 lb. track. A hydraulic lift dump is used.

By the year end the 3500 level had been driven 1066* from the pertal on a 0.3% grade and a N70°W bearing, and had penetrated 326° of glacial hardpan overburden, 300° of highly

weathered Nicola Series rock and the remainder was diorite which was highly chloritised near the Nicola-diorite contact. The adit required full timbering with 10" x 10" squared timber sets and 3" lagging for the first 700' approximately which was later reduced to 8" x 8" timber sets and back-lagging only as the rock became firmer. All timber was purchased locally.

Shortly after the year end the adit penetrated a mineralized section of Micola Series rocks, representing the eastward extension of the mineralized zone, before entering the Micola Series greywacks considered to be the footwall rocks. The adit will be turned to allow a 382°W bearing in the footwall rocks, parallel to the ore zone.

At the year end the crew consisted of 18 hourly rated miners, mechanics and labourers, and 10 men on supervisory technical and clerical staff. All underground work is on a continuous 3 shift per day basis, and all employees live in Merritt.

PCM. CAP and DOMINO Groups (50° 120° SW)

These groups, totalling 65 full size claims were located in December 1957 and are owned by I. Schulman, Vancouver, B. C. The claims are on the south and southwest flanks of Promontory Hills at an average elevation of 3000.

In March 1958, Centennial Mines Ltd., 700 Burrard
Building, Vanceuver 5, B. C., optioned the property and completed
claim surveying, goological mapping, and adip medie and magnetometer surveys over all of the property. A crew ranging from two

to six men were employed from March to August under the immediate direction of T. S. Smith and J. C. Poweraker successively. In late August an extension of the option was obtained jointly by Centennial Mines Ltd. and Magnum Copper Ltd. Some additional dip needle, magnetometer and geological work was done on the Domino claims concurrently with the work on the neighbouring Hank option, but all work ceased in December. A small tent camp was maintained at the Kinvig ranch on Promontory Hill until October, after which all crew stayed in Merritt.

Rocks on the claims are Nicola Series andesites and tuff to the north and west in contact with granite, granodicrite and dicrite to the southeast, together with wide sones of transition rocks along the contact. Kingsvale volcanics mantle the Cap claims and overburden masks large portions of the area. Several small magnetic anomalies attributed to magnetite in andesite in the transition zone, were discovered.

HANK GROUP (500 1200 SW)

This group of 36 claims, located in March 1958 by Wm. Taylor and Associates, and transferred to I. Schulman, Vancouver, B. C., in August, are on the south alope of Prementory Hills, between 4000and 4500 elevation, about ten miles WNW of Merritt, B. C.

In September a joint option by Centennial Mines Ltd.
and Magness Copper Ltd. was obtained, and geological and geophysical mapping, road building and diamend drilling were done.

J. C. Powersker, geologist, directed a crew ranging from 4 to 8 men, including drilling contractors, until December, when all work ceased. The option was dropped later.

Work was concentrated on Hank 30 claims where an intense magnetic anomaly was discovered in an area of Nicola Series volcanics. The anomaly strikes Northwest and the rocks appear to parallel the anomaly in strike, and dip vertically. Three bulldoser trunches were cut to bedrock across the anomaly, with the middle one exposing minor chalcopyrite in andesite.

rhree surface drill holes totalling 1746*, one vertical and two inclined to the south were drilled on two sections representing the most intense portions of the anomaly. All holes intersected various basalts, andesites and agglomerates of the Micola Series. Rocks immediately beneath the anomaly contained above average finely disseminated magnetite that may have been plarised in a single direction, thereby producing the intense anomaly. No other mineralization of interest was noted in the drilling.

A large amount of bulldoser stripping was done by Whm. Taylor and Associates on Hamk fl claims approximately 1/2 mile south of the anomaly in August, in the vicinity of some old pits expesing chalcopyrite in limestone of the Micola Series, without exposing any concentration of mineralization.

In addition to the above work approximately 2 1/2 miles of access road was buildosed, a corehouse was built, a

detailed spontaneous polarisation survey was performed on the Hank anomaly by contractors, and a dip needle survey was carried out over the southern 21 claims.

C. C. Rennie.

CCR/am

Vancouver Office, February 9th, 1959.