

NAME OF PROPERTY MINERAL HILL (BUTTE) (VENUS) (SILVER KING)

OBJECT LOCATED—main zone of molybdenum mineralization.

UNCERTAINTY IN METRES 100. Lat. 54°30'55" Long. 126°44'10"

Mining Division Omineca District Range 5 Coast

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

## DESCRIPTION OF DEPOSIT

Hornfelsic sandstones, siltstones, and crystal tuffs of the Hazelton or Bowser Groups are intruded by three separate bodies. At the west there is a tongue-like body of coarse alaskite, whereas the main mass of the hill is underlain by a porphyritic granite that has aplitic border facies. A large dyke of fine-grained monzonite is unmineralized and relatively unmetamorphosed.

The hornfels are dense dark-purplish to brownish or rarely greenish rocks that weather a light grey where leached or rusty colour where oxidized. The general appearance is similar throughout, and only detailed or microscopic examination shows that the original rock varied widely in lithology and grain size. The degree of metamorphism is fairly uniform, with an overlay of fine-felted brown biotite throughout. Skeletal green hornblende is rare. The alaskite is a coarse-grained rock throughout, of approximately the following composition: Quartz, 35 per cent; perthite and microcline perthite, 20 per cent; plagioclase (An<sub>38</sub>), 25 per cent; muscovite, 4 per cent; opaques, 1 per cent. see Card 2 ....

Associated minerals or products of value - Copper, silver.

## HISTORY OF EXPLORATION AND DEVELOPMENT

Mineral Hill lies about 3 miles south of the summit of Grouse Mountain, and 8 miles north-northwest of Houston. The claims lie on the lower westerly slopes of the hill, just east of Fishpan Lake.

The Silver King group, comprising the Silver King, Motherlode, and Maggie claims, was owned in 1914 by Michael McCormick. Development work to that date was done in open cuts and a 30 foot adit. The Bluebell claim lay to the southwest, at lower elevations; details on it are lacking.

No further activity was reported until the fall of 1924 when the showings were held as the Venus group of 8 claims, owned by J. Bussinger, A.S. Miller, and M.E. Le Blanc. Work during the period 1924-1926 included sinking a shaft to about 60 feet. In 1927 the showings were reported on as part of the Butte group of 6 claims, owned by J. Bussinger.

The area was apparently restaked prior to 1962 by W.D. Yorke-Hardy and associates as the Mineral Hill and Huber groups, totalling 39 claims. Southwest Potash Corporation optioned the property in 1962 and carried out geochemical soil and magnetometer surveys. The magnetometer survey showed a lineal magnetic high trending across the area that closely coincides with the location of the fine monzonite dyke. This body carries about 5 per cent magnetite, much more than adjacent hornfels or granitic rocks, and is clearly the source of the anomaly. The option was subsequently given up.

The owners of the property, in February 1965, incorporated Moly mine Explorations Ltd. to carry out further exploration work. During the year, geochemical and induced potential surveys, bedrock stripping, and the drilling and blasting of trenches, was carried out. Additional claims were staked and optioned to a total of 131 claims.

In the spring of 1966 Cominco Ltd. optioned the property and over a 4 month period carried out geological mapping and diamond drilling; the option was terminated during the summer. Work during the latter part of the year was carried out by Moly mine. The 1966 work included geological, geochemical, and geophysical surveys, the drilling and blasting of 6,500 feet of trench, bedrock stripping, and 7,300 feet of diamond drilling in 15 holes. During 1967 a geochemical survey over 10 claims, trenching and stripping, 9,456 feet see Card 2 ....

HISTORY OF PRODUCTION

REFERENCES

- Brown, A. Sutherland; Huber; Report of Minister of Mines, British Columbia, 1965, p. 75.
- Reports of Minister of Mines, British Columbia: 1914, p. 227; 1924, p. 98; 1925, p. 141; 1926, p. 137; 1927, p. 138; 1966, p. 102; 1967, p. 107.
- Mineral Policy Sector; Corporation Files: "Molybdenum Explorations Ltd."

*BCDM Bull 64, P. 114*

MAP REFERENCES

- #Geology of the Huber Group, Sc. 1":800 ft., Fig. 10, Report of Minister of Mines, British Columbia, 1965.
- Map 69-1, Smithers, Hazelton, and Terrace Areas, (Geological compilation), Sc. 1":4 miles, British Columbia Dept. of Mines.
- Map 671 A, Houston, (Geol.), Sc. 1":4 miles (1942).
- Map 5311 G, Quick, (Aeromag.), Sc. 1":1 mile.
- \*Map 93 L/10 E, Quick, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR						
Date	12-75						

PRODUCT

MOLYBDENUM

PROVINCE OR TERRITORY  
British Columbia

N.T.S. AREA 93 L/10

Card 2 -  
REF. MO 1

NAME OF PROPERTY MINERAL HILL (BUTTE) (VENUS) (SILVER KING)

## DESCRIPTION OF DEPOSIT (continued)

The porphyritic granite is normally composed of about 65 per cent phenocrysts of perthite, quartz and plagioclase and minor mica in an aplitic fine-grained matrix of quartz, perthite, and micrographic granite and lesser small laths of plagioclase. The approximate mineral composition, combining matrix and phenocrysts is perthite, 41 per cent; quartz, 29 per cent; plagioclase 27 per cent; and mica 3 per cent. The porphyry grades to a fine aplitic granite at exposed contacts. The fine-grained monzonite has a diabasic texture with relatively long laths of plagioclase with angular semiophitic hornblende and interstices of quartz and micrographic granite.

Most of the hornfels is shattered, and much contains very fine veinlets of quartz with some pyrite in a reticulate stockwork. Fractures are commonly an inch or so apart. Veinlets are commonly only a millimetre or so thick, but in certain areas some may be several inches thick. The alaskite tongue is also highly fractured and veined, but in a slightly more regular manner, and larger quartz veinlets are common. The porphyritic granite is less fractured and veined, except in two localities. The monzonite is seemingly unfractured or unmineralized. On Mineral Hill No. 1 and No. 4 claims molybdenite is widely present in the veinlets and fractures in small but interesting amounts. Other metallic minerals such as tetrahedrite occur in more restricted distribution in the larger veins near the old shaft.

The shaft, dating back to 1926, was sunk on a 3 to 4 foot wide quartz vein which was traced on both sides of the shaft for a total length of 275 feet. The vein, striking N35°W (mag.) and dipping 60°E, consists of quartz and country rock sparsely mineralized with galena, sphalerite, chalcopyrite, and tetrahedrite.

The old Silver King adit was driven on a brecciated shear zone, locally up to 3 feet wide, in granite porphyry. A sample across 2.5 ft., the full width of the vein at the face of the adit, assayed: Gold, trace; silver, 5 ounces per ton.

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

of rotary drilling in 102 holes, and 4,291 feet of diamond drilling in 13 holes was carried out.

*Dafrey Res Inc GCNL 8/08/85*