

NAME OF PROPERTY MOLY (BELL MOLYBDENUM)

OBJECT LOCATED - Northeast end of quartz monzonite stock.

UNCERTAINTY IN METRES 300. Lat. 55°27'40" Long. 129°19'50"

Mining Division Skeena District

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

Amax Inc.

DESCRIPTION OF DEPOSIT

Molybdenite mineralization is associated with an elliptical stock of quartz monzonite porphyry, elongate in a east-northeast direction and measuring 670 by 335 m. The stock intrudes a sequence of Upper Jurassic Hazelton group dark grey to black siltstones and greywackes, which are thermally metamorphosed to biotite hornfels a distance of 365 to 460 m outward from the stock contact. The stock contact, which dips steeply outward, is not well defined, as it consists of a transitional zone of hornfels cut by numerous porphyry dykes. A large horse of hornfelsed sedimentary rocks within the stock, measuring 300 by 60 m, parallels the long direction of the stock and is cut by numerous porphyry dykes. Drilling information suggests that this block of country rock decreases in size with depth.

Quartz monzonite porphyries of the stock include three major types. The main type, leucocratic quartz monzonite porphyry, occupies the central part of the stock. Near the stock contacts and in dykes peripheral to the stock, the leucocratic quartz monzonite porphyry is gradational to a quartz monzonite or

see Card 2

Associated minerals or products - Tungsten.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at approximately 2,400 feet elevation on Clary Creek, 6 miles east-southeast of the community of Alice Arm.

Prospectors for Highland-Bell, Limited discovered the showings in 1965 and staked 135 recorded claims. Work during 1966 included geochemical soil and silt surveys and 3,169 feet of diamond drilling in 12 holes, carried out as a joint venture by a subsidiary company, Mastodon-Highland Bell Mines Limited, and Leitch Gold Mines Limited. In September 1966 the latter two companies incorporated Bell Molybdenum Mines Limited to acquire the property. Work by Bell Molybdenum in 1967 included geological mapping and 14,753 feet of diamond drilling in 24 holes. Results of the drilling gave an estimate of 35,860,000 tons grading 0.11% molybdenite, of which 21,148,000 tons graded 0.143% molybdenite (Highland-Bell L 1967 AR).

Geological mapping during 1969 located isolated outcrops of biotite hornfels some 2,000 feet east of Clary Lake. A geochemical soil survey, trenching and sampling was carried out over this part of the property in 1970.

Amax Inc. purchased the property in August 1975 for its wholly owned subsidiary Climax Molybdenum Corporation of British Columbia, Limited. The property was restaked as the R, G, and Fubar claim groups comprising about 100 units. Work during 1976 included diamond drilling in 7 holes totalling 2,550 metres on R4 and one hole totalling 280 metres on R2. Most of the drilling was in a new zone about 1 370 metres southwest of the Main zone. Additional drilling in 1977 on the R 1, 2, 4 claims, outside the Main zone, totalled 2 684 metres in 8 holes. The property was assigned to Amax of Canada Limited. An amended sale agreement requires the payment to Bell Molybdenum of an annual sustaining fee and a royalty on production. The property is estimated to contain 106,000,000 tons averaging 0.09% MoS₂ (Canadian Mines Handbook 1985-86, p. 61). One possible open pit design, to a depth of about 700', suggests a reserve of 56,000,000 tons averaging 0.10% MoS₂ (George Cross News Letter, June 14, 1983).

HISTORY OF PRODUCTION

REFERENCES

Reports of Minister of Mines, British Columbia:
1966, p. 48; 1967, pp. 44-47⁺.

††Woodcock, J.R. and Carter, N.C.; Geology and Geochemistry of the Alice Arm Molybdenum Deposits; Porphyry Deposits of the Canadian Cordillera, The Canadian Institute of Mining and Metallurgy, Special Volume 15, pp. 462-466, 1976.

Mineral Policy Sector; Corporation Files: "Highland-Bell, Limited"; "Bell Molybdenum Mines Limited".

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 69; 1970, p. 95.

Exploration in British Columbia; BCDM: 1976, p. 165; 1977, p. 209.

Geological Fieldwork; BCDM: 1976, p. 58; 1977, p. 69.

Geology in British Columbia; BCDM: 1976, p. 119; 1977-81, p. 142.

Porphyry Copper and Molybdenum deposits, West-Central British Columbia; Bulletin 64, p. 96, BCDM, 1981.

George Cross News Letters: 1982, No. 103; 1983, No. 114; 1985, No. 4.

MAP REFERENCES

#Geology of the Moly Group, Sc. 1":800 ft., Fig. 5, Report of Minister of Mines, British Columbia, 1967.

Map 307 A, Portland Canal Area, (Geol.), Sc. 1":4 miles - accomp. Memoir 175, Geol. Surv. of Canada.

*Map 103 P/6, Aiyansh, (Topo.), Sc. 1:50,000.

General Geology, West-Central British Columbia, Figure 8, Bulletin 64.

Porphyry Molybdenum Deposits, Alice Arm-Nass River Area, Fig. 19, Bulletin 64.

REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	2-79	08-86					