PRODUCT *PRODUIT*	PROVINCE OR TERRITORY *PROVINCE OU TERRITOIRE*	N.T.S. AREA *RÉGION DU S.N.R.C.*	REF. *RÉF.*
MOLYBDENUM	British Columbia	93 L/14	MO 1

NAME OF PROPERTY *NOM DE LA PROPRIÉTÉ*: GLACIER GULCH

OBJECT LOCATED *OBJET LOCALISÉ* - Area of strong mineralization projected to surface.

UNCERTAINTY *FACTEUR D'INCERTITUDE*: 300 m

Lat. *Lat.*: 54°48'50"

Long. *Long.*: 127°18'00"

Mining Division *Division minière*: Omineca

District *District*: Range 5, Coast

County *Comté*:

Township or Parish *Canton ou paroisse*:

Lot *Lot*:

Concession or Range *Concession ou rang*:

Sec *Sect.*:

Tp. *Ct.*:

R. *R.*:

OWNER OR OPERATOR/*PROPRIÉTAIRE OU EXPLOITANT*

DESCRIPTION OF DEPOSIT/*DESCRIPTION DU GISEMENT*

Hazelton group Jurassic volcanic rocks are intruded by an unexposed granodiorite sheet that is host to most of the higher grade mineralization. A rhyolite porphyry plug about 300 metres in diameter, and dated as Palaeocene, intrudes volcanic rocks and the bottom of the granodiorite sheet. The plug is truncated at depth by a quartz monzonite stock lying beneath the granodiorite sheet.

Molybdenite is confined to fractures and quartz veins, except for a minor disseminated occurrence in the stock immediately below the porphyry plug. The mineralization occurs over a surface area of about 1½ by 2½ km and a vertical distance of at least 2,100 m. Strands of +0.2 per cent molybdenite appear over more than 600 metres vertically. The granodiorite sheet has background values of 0.0x per cent molybdenite but most +0.2 per cent molybdenite is either within the sheet or in the immediate adjacent volcanic rocks. The plug and stock contain 0.0x and 0.00x per cent molybdenite respectively.

p.t.o. ..

Associated minerals or products *Minéraux ou produits associés* - Tungsten, copper.

HISTORY OF EXPLORATION AND DEVELOPMENT
HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

The property is located between elevations of 3,000 and 7,000 feet in Glacier Gulch on the northeast side of Hudson Bay Mountain, 5 miles northwest of Smithers.

The occurrence was known locally for many years. Kindle (1954) reported molybdenum in a trap dyke a short distance below the glacial ice front.

Four claims were located on the showings in May 1956 by W.D. Yorke-Hardy & associates, of Smithers. Additional staking was done the following year to a total of 30 claims. In December 1957 the claims were optioned to Climax Molybdenum Company. This company in January 1958 merged with The American Metal Company, Limited to form American Metal Climax, Inc. Exploration work on the property was carried out by Southwest Potash Corporation, the Canadian exploration arm of the company. Additional staking was done to a total of about 224 claims. During the years 1958-1965 inclusive, surface diamond drilling totalling 79,000 feet was done in 41 holes. In 1966 an adit was collared at the 3,500 foot elevation on the south side of the gulch and driven southwesterly for 6,000 feet; the adit was extended to 6,200 feet in 1967 and four crosscuts totalling 3,000 feet were driven. Underground diamond drilling during 1967-68 totalled 40,793 feet in 33 holes. Operations were transferred to a wholly owned subsidiary, Climax Molybdenum Corporation of British Columbia, Limited which was registered in British Columbia in September 1968.

During 1970 the 150 south crosscut was advanced 300 feet and more than 20,000 feet of underground diamond drilling was done in some 25 holes. The company purchased the property from the Yorke-Hardy group in 1971. Further underground work during the period 1971-1973 included the driving of two bulk sample raises totalling 280 feet, 872 feet of drifting, and 51,376 feet of diamond drilling in 56 holes. Reserves were reported in 1973 at 90,720,000 tonnes grading 0.29% MoS_2 (B.C. Dept. of Mines, Mineral Inventory, 93 L - 110).

The parent company (American Metal Climax) changed its name in 1974 to Amax Inc. The property, as held in 1974 by the subsidiary, Climax Molybdenum Corporation of British Columbia, Limited, comprised Mineral Leases M-8, M-81 to M-85, and 252

p.t.o. ....

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Mineral Policy Sector, Department of Energy, Mines and Resources, Ottaw
Secteur de la politique minérale, ministère de l'Énergie, des Mines et des Ressources, Ottaw

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)
HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

located claims. Surface diamond drilling in 3 holes totalling 478 feet was done on the Jay 4-8 claims in 1974. Further drilling was reported in 1977 and 1979.

Atkinson, 1983, states: "within a large low-grade geological ore reserve there are 20,000,000 tonnes of 0.3 to 0.4 per cent MoS_2 and 0.039 per cent WO_3.

Diamond drilling in 1977 was limited to deepening several holes; 1979 drilling was done in 4 surface holes (527 m) and 14 underground holes (1 884 m); drilling by Climax in 1980 totalled 274.5 m.

Reserves are reported as 30 000 000 tonnes at 0.26% MoS_2 and 0.06% Wo_3 (Preliminary Map 65, BCDM, 1986).

MAP REFERENCES/*RÉFÉRENCES CARTOGRAPHIQUES*

Geology in the vicinity of Glacier Gulch, Sc. 1":½ mile, Fig. 11, Report of Minister of Mines, British Columbia, 1966.

#Hudson Bay Mountain, Fig. 2, Spec. Vol. 15, p. 456.

Map 69-1, Geological Compilation Map of the Smithers, Terrace, and Hazelton Areas, Sc. 1":4 miles - B.C. Dept. of Mines, 1969.

Map 971 A, Smithers-Fort St. James, (Geol.), Sc. 1":8 miles.

Map 5319 G, Smithers, (Aeromag.), Sc. 1":1 mile.

*Map 93 L/14, Smithers, (Topo.), Sc. 1:50,000.

General Geology West-Central BC, Sc. 1":5 miles, Fig. 8 and Porphyry Deposits, Fig. 4, accomp. Bulletin 64.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

Tungsten, a possible by-product, occurs chiefly as scheelite, but minor amounts of wolframite are found down-dip in the granodiorite sheet. The tungsten zone generally straddles the upper +0.2 per cent molybdenite boundary.

Chalcopyrite occurs in a zone (defined by ≥0.04% Cu) that is lateral to and above +0.2 per cent molybdenite.

Comp./Rev. By *Comp./rév. par*	DMacR	DMacR					
Date *Date*	10-83	05-87					

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