

PRODUCT PRODUIT		COPPER		PROVINCE OR TERRITORY		PROVINCE OU TERRITOIRE		British Columbia		N.T.S. AREA 92 0/2 RÉGION DU S.N.R.C.		REF. CU 1 RÉF.	
NAME OF PROPERTY NOM DE LA PROPRIÉTÉ						POISON MOUNTAIN (COPPER 1-4)							
OBJECT LOCATED - Mineralized zone. OBJET LOCALISÉ													
UNCERTAINTY FACTEUR D'INCERTITUDE						Lat. 51°08'00" Lat.		Long. 122°36'50" Long.					
Mining Division Clinton <i>Division minière</i>						District <i>District</i>							
County <i>Comté</i>						Township or Parish <i>Canton ou paroisse</i>							
Lot <i>Lot</i>						Concession or Range <i>Concession ou rang</i>							
Sec <i>Sect.</i>						Tp. <i>Ct.</i>		R. <i>R.</i>					
OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT Lac Minerals Ltd.													
DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT <p>Jura-Cretaceous sedimentary rocks exposed near the property comprise interbedded greywackes, argillites, and conglomerates. Several thin bedded siltstone members are exposed. The beds average 2 centimetres thick, dip steeply, and strike from north to N60°W.</p> <p>Three porphyry intrusions are found at Poison Mountain: the Main Porphyry, which contains most of the important sulphide concentrations, the North Porphyry, which is similar but smaller, and the East Porphyry, which differs in composition and is almost barren of copper mineralization. The Main and North porphyry intrusions vary locally in composition and are irregular in configuration. They are separated by hornfels at the surface, but may be joined at depth. They are both zoned and consist of similar core and border phases. The cores are composed of hornblende-quartz monzonite porphyry.</p> <p>The border zones are very irregular and grade inward to the core and outward to the sedimentary host rocks. The parts which appear to be intrusive are biotite-quartz monzonite. Hornblende is not evident megascopically; it appears originally to have formed 15 to 20 per cent of the rock, but is almost</p> <p style="text-align: right;">see Card 2</p>													
HISTORY OF EXPLORATION AND DEVELOPMENT HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR <p>The property is located at the 5,700 foot elevation on the southwest side of Poison Mountain, some 40 miles northwest of Lillooet. The main mineralized zone lies on Copper Creek, a westerly flowing tributary of Poisonmount Creek. The North zone is at Fenton Creek, about ½ mile to the northwest.</p> <p>Claims were staked on Copper Creek in 1935 and again in 1941. By 1946 the showings had been explored by a dozen or more pits and trenches. The Copper Nos. 1, 2, 3 and 4 claims were located by H. Reynolds of Lillooet in 1955 and covered ground originally staked in 1935.</p> <p>The Granby Consolidated Mining Smelting and Power Company Limited optioned the four claims from Mr. Reynolds in 1956 and staked 39 additional claims around and adjacent to the original group. Work during the year included bulldozer stripping, and 1,973 feet of diamond drilling in 10 holes; the company subsequently dropped the option.</p> <p>The property was inactive until 1959 when the New Jersey Zinc Exploration Company (Canada) Ltd. optioned the 4 claims from H. Reynolds and recorded 16 additional claims. During the year magnetometer and geochemical surveys were carried out over 14.5 line-miles. In 1960, diamond drilling totalling 2,000 feet was done in 15 vertical holes; the option was terminated at the end of the season.</p> <p>In 1961 the property, consisting of about 48 claims and fractions, was held by H. Huestis & associates, partly by record and partly on option from H. Reynolds. They optioned the property to American Smelting and Refining Company Ltd., who completed an induced polarization survey and further trenching.</p> <p>Copper Giant Mining Corporation Limited, on incorporation in February 1966 purchased the 155 claim property from Mr. H. Reynolds and associates for 700,000 shares. The company began a drilling program on an anomaly outlined by an earlier survey. By an agreement of July 1, 1966, Homestake Mineral Development Company entered into a joint venture agreement with Copper Giant for a 70% interest in the property. In December 1966, Homestake transferred 1/3 of its interest in the agreement to Canadian Superior Exploration Limited. The property was expanded to 180 claims, including the Copper, PM, Giant and Cheap groups. Work by the two companies to the end of 1971</p> <p style="text-align: right;">see Card 2</p>													
Associated minerals or products - Molybdenum, gold. <i>Minéraux ou produits associés</i>													
Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa Secteur de la politique minière, ministère de l'Énergie, des Mines et des Ressources, Ottawa 503275													

Reports of Minister of Mines, British Columbia:
 1946, p. 101; 1956, p. 35; 1959, p. 25;
 1960, p. 19; 1961, p. 23⁺; 1966, p. 136;
 1967, p. 127.

Mineral Policy Sector; Corporation Files:
 "Copper Giant Mining Corporation Limited";
 "Homestake Mineral Development Company";
 "Long Lac Mineral Exploration Limited"; "The Little
 Long Lac Group of Companies".

Geology, Exploration, and Mining; British Columbia Dept.
 of Mines: 1970, p. 216; 1971, p. 326.

⁺⁺Seraphim, R.H. and Rainboth, W.; Poison Mountain;
 Porphyry Deposits of the Canadian Cordillera, The
 Canadian Institute of Mining & Metallurgy, Spec. Vol.
 15, pp. 323-328, 1976.

Exploration in British Columbia; BCDM: 1980, p. 282.

Geological Fieldwork; BCDM: 1980, p. 117.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

#Poison Mountain, (Geol.), Sc. 1":1,600 ft., Fig. 1, CIM Spec
 Vol 15, p. 324.

*Map 92 0/2, Tyaughton Creek, (Topo.), Sc. 1:50,000.

Copper Group, Poison Mountain (Simplified Geol.), Sc. 1":
 1,500 ft., Fig. 4, Rept. of Minister of Mines, British
 Columbia 1961, p. 23.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	DMacR	DMacR				
Date Date	12-78	05-81	05-86				

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NAME OF PROPERTY NOM DE LA PROPRIÉTÉ		POISON MOUNTAIN (COPPER 1-4)		HISTORY OF EXPLORATION AND DEVELOPMENT (continued) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR		
DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)		included magnetometer, induced polarization and geochemical surveys, 5,937 metres of diamond drilling in 40 holes, and 4,131 metres of percussion drilling in 62 holes.				
totally replaced by fine-grained green-brown biotite, minor magnetite, chalcopyrite and a few coarse grains of apatite.		"The mineral resource is indicated to be in the order of 175 million tonnes averaging 0.33 per cent copper, 0.015 per cent molybdenum and 0.3 g/tonne of gold, using a cutoff grade of 0.25 per cent copper. The calculated stripping ratio is approximately 0.7 tonnes of waste to 1 tonne of mineral resource." (CIM Spec Vol 15, p. 323, 1976).				
Sulphides, in decreasing abundance, include pyrite, chalcopyrite, molybdenite and bornite. Quartz, gypsum and calcite are the main non-metallic hydrothermal minerals.		Long Lac Mineral Exploration Limited in 1974 acquired a controlling interest in Copper Giant Mining by the purchase of one million shares; by 1980 this interest was increased to 56.98%. In 1979 Long Lac purchased the 70% interest in the property held by Homestake and Canadian Superior, subject to a royalty of 5% of net profit payable to Homestake. Work during the fall of 1979 and 1980 included 17,000 metres of percussion and 8,058 metres of diamond drilling, and metallurgical studies. Feasibility studies were carried out in 1981. Drill indicated reserves were estimated at 529 000 000 tonnes at 0.24% Cu, 0.007% Mo, 0.004 oz/t Au (Long Lac Minerals Ltd, Listing Statement 2871). The company name was changed in 1982 to Lac Minerals Ltd.				
The sulphides exist as vein and fracture fillings and as disseminations. Pyrite is widespread and forms an irregular halo in the host rocks around the Main and North intrusions as well as occurring within these intrusions.						
Chalcopyrite, bornite and molybdenite are found closer to the intrusions, principally in and near the perimeter of the biotite-quartz monzonite porphyry. The chalcopyrite and bornite mineralization is estimated to be almost equally divided between dissemination, chiefly replacing mafic minerals, and fracture filling in quartz veins and 'dry' fractures. The molybdenite observed was invariably associated with fracture fillings with or without quartz.						
The North Porphyry contains very similar grades locally, and on further exploration may provide some small reserves at a slightly lower cutoff grade than those of the Main Porphyry.						