PRODUCT	PROVINCE OR TERRITORY	N.T.S. AREA	REF.
MOLYBDENUM	British Columbia	93 L/12	Mo 1

NAME OF PROPERTY: KATIE (SERB CREEK)

OBJECT LOCATED-showing.

UNCERTAINTY IN METERS -100. Lat. 54°38'45" Long. 127°45'15"

Mining Division: Omineca — District: Coast, Range 5

County — Township or Parish

Lot — Concession or Range

Sec — Tp. — R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The head of Serb Creek is underlain by a stock that is separated from the Howson Batholith by an area of Hazelton Group into which both are intruded. The stock is composed principally of medium-grained granodiorite but has in its core a fine-grained plug of quartz monzonite. The stock is transected in the vicinity of the fine-grained plug by a dyke swarm that trends about north 30 degrees to 40 degrees west.

The fine quartz monzonite is intruded by small irregularly shaped bodies of quartz diorite porphyry, then by a sequence of tabular lineal dykes in the following order from oldest to youngest: quartz monzonite porphyry; dark-green to grey andesite dykes; quartz feldspar porphyry; brown sericitized granodiorite porphyry. The whole suite of rocks is a fairly similar group, with only slight variations in crystallinity or mineral composition. The average composition is a mafic-poor granodiorite,

see Card 2 ....

Associated minerals or products of value

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the head of Serb Creek, 25 miles southwest of Smithers.

The showings were discovered in August 1964 by Amax Exploration, Inc., during a helicopter reconnaissance of the area. A total of 151 claims were staked in four groups, the Katie, Petra, Ty, and Pro. During the latter part of that year work included surface geology, sampling, geochemistry, minor packsack drilling, line cutting, and surveying. In 1965 work included detailed surface geology, magnetometer, induced polarization, and soil surveys, and 14 diamond-drill holes totalling 16,500 feet. Work during 1966 included geological, geophysical, and geochemical surveys, and 5,000 feet of diamond drilling in 5 holes.

Probable reserves have been estimated at 41 150,000 tonnes averaging 0.08% MoS_2 (Preliminary Map 65, BCDM, 1986).

Kennco Explorations, (Western) Limited held the Katie 17-19 and Petra 17, 18 claims in 1971.

The New Katie 2, 17, 18, New Petra 2, 17, 18, SC 1 (16 units) and SC 2 (9 units) were owned in 1975 by T.L. Sadlier Brown and Exaton Resources Ltd. An option on the property was held by Craigmont Mines Limited, who carried out approximately 1,000 metres of diamond drilling in 3 holes on New Petra 2 and SC 1.

Mineral Resources Branch, Department of Energy, Mines and Resources, Ottawa

511845

HISTORY OF PRODUCTION

MAP REFERENCES

#Geology of the Serb Creek property, Sc. 1":1,750 ft., Fig. 11, Report of Minister of Mines, British Columbia, 1965, p. 78.

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

Map 44-23, Smithers, (Geol.), Sc. 1":2 miles, Paper 44-23, Geol. Surv. of Canada.

Map 93 L (MI), Mineral Inventory Map, British Columbia Dept. of Mines.

Map 93 L, Smithers, (Topo.), Sc. 1:250,000.

*Map 93 L/12, Milk Creek, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR	DMacR	DMacR			
Date	12-73	12-75	1-79	05-87			

REFERENCES

+Brown, A. Sutherland; Serb Creek; Report of Minister of Mines, British Columbia, 1965, pp. 76-80.

Report of Minister of Mines, British Columbia: 1966, p. 91.

Mineral Deposit Inventory, Property No. 2238, British Columbia Dept. of Mines.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1975, pp. E 142, G 65.

NAME OF PROPERTY KATIE (SERB CREEK)

DESCRIPTION OF DEPOSIT (continued)

and all are characteristically leucocratic. The sequence overlaps mineralization which must have occurred between the introduction of the quartz monzonite porphyry and the small andesite dykes.

The area of the showings is dominated by a north 30- to 40-degree west fracture system that is evident in the dyke swarm, the main shears and alteration zone, and in the topography. Approximately co-extensive with the plug but extending somewhat beyond it is a pyrite halo affecting all rocks except some young dykes.

Low-grade molybdenum mineralization is widely distributed within the fine quartz monzonite plug. Sulphide minerals in addition to molybdenite are scant, but include chalcopyrite, galena, and sphalerite. The mineralization is contained in quartz veins and quartz stockworks and in dry fractures. The veins and veinlets are dominantly composed of quartz with lesser pyrite and some molybdenite. Some are quartz-epidote veinlets; others are pyrite, pyrite-molybdenite, or molybdenite-epidote coated fractures. The latest veinlets are drusy quartz veins with calcite and some galena and sphalerite. Some of the veins have been sheared or brecciated, particularly those in the north 30- to 40-degree west orientation, and in the vicinity of the larger shears.