

NAME OF PROPERTY RAINBOW (CHIEFTAIN) (SUGARLOAF HILL)

OBJECT LOCATED - northerly trending fault zones.

UNCERTAINTY IN METRES 500. Lat. 50°38'10" Long. 120°27'50"

Mining Division Kamloops District

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The property lies on the southwestern edge of the Iron Mask batholith. The mineralization is in altered microdiorite of the Iron Mask batholith and in microdiorite porphyry of the Sugarloaf intrusions, all of which are Upper Triassic in age. Strong faulting and fracturing in a northwesterly direction and cross-faulting in a northeasterly direction are prominent on the property. The batholithic rocks of the northern part of the property are mainly microdiorite. The southern part of the property is underlain by Upper Triassic volcanic rocks of the Nicola Group, locally intruded by picrite basalt. Sugarloaf Hill is composed, except for its northern flank, of grey-green porphyritic microdiorite, commonly with conspicuous phenocrysts of hornblende. These rocks, at the contact between the microdiorite and Nicola volcanics, were recognized in 1960 as being post-Iron Mask and were assigned the name Sugarloaf Intrusions. Copper mineralization is found in several northeasterly striking faults which cut the Sugarloaf rocks. Early exploration work in several shafts and adits exposed brecciated rock carrying pyrite and chalcopyrite as disseminations and in irregular bands.

Associated minerals or products of value

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the east flank of Sugarloaf Hill, about $5\frac{1}{2}$ miles southwest of Kamloops.

The Chieftain Group, comprising the Chieftain, Chieftain No. 2, and Northern claims, was located in 1896 by R.H. Lee. The nearby Lone Tree (Lot 883) and Green Cub claims were located at a later date. The Lone Tree claim was Crown-granted to Mr. Lee in 1903. The initial exploration work, begun in 1896, included two 50 foot shafts and an adit. The Chieftain Copper Mines of British Columbia, Limited, was incorporated in September 1901 by Detroit interests to acquire the property. Very little exploration work was reported; the company charter was surrendered in 1912.

No further activity was reported until 1961 when Huestis Mining Corporation Ltd. optioned 23 claims from Mr. H. Messmar, of Kamloops. Work by the company included bulldozer stripping, and diamond drilling in 4 holes. The option was subsequently dropped. Western Beaver Lodge Mines Ltd. during 1965 held a number of claims in the Rainbow, Lee, IO, RO, and Rob groups, and the Lone Tree Crown-grant. Geophysical work was reported at that time. Vanco Explorations Limited is reported to have held the ground in 1966 and to have carried out limited geophysical and geochemical surveys, and diamond drilling in 2 holes. Belcarra Explorations Ltd. held the property in 1969. A geochemical survey, bulldozer trenching, and 350 feet of diamond drilling in 5 holes was reported.

Leemac Mines Ltd. in 1971 optioned the Rainbow and Lee groups (31 claims), and Mineral Lease 23K (Lot 883) from the Messmar interests and R.J. Hickey, all of Kamloops. Exploration work during the latter part of the year included the rehabilitation of the grid lines used in the magnetometer and induced potential surveys by Western Beaver Lodge Mines; this work had indicated a circular shaped series of 4 anomalous highs. Other work by Leemac in 1971 included trenching, a geochemical survey south of Sugarloaf Hill, 1,000 feet of Winkie diamond drilling, and 2,000 feet of percussion drilling. Wireline diamond drilling was begun on Zone No. 1 in December and 11 holes totalling 5,265 feet were completed.

Western Mines Limited, by an option agreement of March 1972, purchased 100,000 treasury shares with the option of further participation. Drilling continued in Zone 1 and was expanded to Zone 2 in May. Some 31 holes totalling about
see Card 2

Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa.

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HISTORY OF PRODUCTION

REFERENCES

Reports of Minister of Mines, British Columbia;
 1896, p. 566; 1898, p. 1103; 1899, p. 732; 1901,
 p. 1078; 1961, p. 48; 1965, p. 243.

Geology, Exploration and Mining; British Columbia Dept.
 of Mines: 1969, p. 236; 1973, p. 197⁺; 1974,
 p. 150; 1976, p. E 98; 1977, p. E 155; 1979, p. 175.

Chisholm, E.O.; Report on Leemac Mines Ltd. Rainbow
 Property, May 21, 1973 - in Leemac Mines Ltd.,
 Statement of Material Facts, June 4, 1973.

⁺⁺Cockfield, W.E.; Geology and Mineral Deposits of Nicola
 Map-Area, British Columbia; Memoir 249, p. 115,
 Geol. Surv. of Canada, 1948.

Mineral Policy Sector; Corporation Files: "Leemac Mines
 Ltd."; "Getty Mining Pacific, Limited"; "Nahatlatch
 Resources Ltd."; "Canadian Superior Exploration
 Limited"; "Pacific Seadrift Resources Ltd.";
 "Craigmont Mines Limited".

Geological Fieldwork; BCDM: 1977, p. 37.

Exploration in British Columbia; BCDM: 1979, p. 175;
 1981, p. 38.

MAP REFERENCES

#Fig. 13, Eastern Part of Iron Mask Batholith, (Geol.),
 Sc. 1":1 mile - Report of Minister of Mines, British
 Columbia, 1967.

Map 886 A, Nicola, (Geol.), Sc. 1":4 miles - accomp.
 Memoir 249.

Map 5216 G, Kamloops, (Aeromag.), Sc. 1":1 mile. (1968).

*Map 92 I/9, Kamloops, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR	DMacR	DMacR			
Date	8-78	02-82	05-84	04-87			

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HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

18,000 feet were completed to mid June. Western Mines decided not to purchase further shares and the agreement terminated in July 1972. Leemac continued the drilling program and to April 1973 had partially outlined a mineralized breccia zone (Zone 2) containing an indicated 15,624,200 short tons with a weighted average grade of 0.54% copper (Chisholm, E.O., May 21, 1973 - in Leemas Mines Ltd. Statement of Material Facts, June 4, 1973).

Leemac in July 1973 optioned the property to Getty Mining Pacific, Limited; Getty at that time held an option agreement on four adjacent properties. Work on the Rainbow property in 1973 included geological mapping, an induced potential survey over 3.8 line-miles, a magnetometer survey over 18 line-miles, 2,922 feet of rotary drilling in 5 holes on Rainbow 5, 6 and D 1 Fr., and 16,380 feet of percussion drilling in 47 holes. Further diamond drilling was done in 1974 in 1 hole to a depth of 1,028 feet on Rainbow 17 claim. Getty abandoned the option in the latter half of 1974.

Nahatlatch Resources Ltd. in December 1975 optioned a 65% interest in 51 claims and 1 mineral lease from Leemac Mines Ltd.; the company name (Leemac) was changed in April 1976 to LMC Resources Ltd. Work by Nahatlatch during 1976 included diamond drilling in 23 holes averaging 300 metres in depth. Under the terms of the option agreement the property was then owned by Nahatlatch (65%) and LMC Resources (35%). No. 2 zone reserves were reported as 14,675,000 tons indicated averaging 0.59% copper, and 12,940,000 tons inferred of an expected comparable grade, to a depth of 1,000 feet. Included is a higher grade section of 4,302,000 tons averaging 1.05% copper. (Northern Miner, Dec. 9, 1976). Further diamond drilling was carried out in the first part of 1977.

By 1977 the property had been re-staked as 4 claims, the Rainbow NE, SE, SW, NW (26 units). Canadian Superior Exploration Limited optioned this ground in June 1977; the company also held an option on the adjacent Victor, Iron Mask, Iron Cap and DM properties (92 I/9, Cu 1, 7-9). Work on the Rainbow ground included 9 percussion drill holes totalling 570 metres and 375 metres of diamond drilling in 2 holes; the option was terminated in the fall of 1977.

continued

Seadrift Resources Ltd. was formed in November 1978 by the amalgamation of Nahatlatch Resources and LMC Resources. The company name was changed in August 1980 to Pacific Seadrift Resources Ltd.

In 1979 diamond drilling in 10 holes totalling 3,070 metres was done on Rainbow SE. Late in 1979 the company purchased the adjacent Kam, Roda, Roda 2 and Red Head claims (15 units) from Sovereign Metals Corp; geophysical surveys and drilling had been carried out on these claims by Sovereign in 1976 and Canadian Superior Exploration in 1977. Pacific Seadrift in 1980 spent \$155,000 as part of the cost of drilling 10 holes on its property.

E & B Canada Resources Ltd contributed \$1 million to exploration costs in 1980-81 for a 6% interest in the combined Rainbow, Victor, Iron Mask, Iron Cap and DM properties. Based on work to date, drill indicated reserves were estimated at 105,000,000 tons grading 0.32% Cu and 0.008 oz/t Au (Joint Management Information Circular, Royex Sturgex Mining and Cullaton Lake CML, (27/04/84).

Craigmont Mines Limited in February 1981 optioned the above 5 combined properties. Diamond drilling 5 579 m in 34 holes on the Rainbow and Victor (CU 7). This work indicated insufficient tonnage to support an independent mining operation; the option was given up in September 1981.

The company name (Pacific Seadrift) was changed in 1985 to Seadrift International Exploration Ltd.