Canadian Exploration Ltd., 700, 1030 West Georgia St., Vancouver, B.C.

**DESCRIPTION OF DEPOSIT** 

The formation consists of the Laib argillites and overlying limestones. These are cut, in the vicinity of the orebodies by three tongues or stocks of granite which are offshoots from the Nelson batholith. The sediments, on the eastern limb of an anticline, strike north 10 to 20 degrees east and dip eastward into the hillside at about 50 degrees.

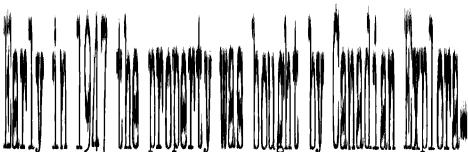
The Emerald ore zone lies along the western margin towards the southern end of the main stock in the central part of the property. The Feeney orebody lies on the east side of the main stock, towards its north end. The Dodger orebody lies about 2,000 feet to the east of the Emerald.

The ore is localized in troughs formed between granite apophyses which rise from the granite basement. The greatest thickness of ore is found as a rule low down in the trough, however the ore climbs up the flanks for distances up to 200 see Card 2 .... feet.

Associated minerals or products of value

THE THIRTIE , MOD GTOCOACTER.

In August 1942 the property was purchased by the Dominion Government who operated it through the Wartime Metals Corporation. A mill was built beside the Nelson-Nelway Highway and put into production in August 1943 but on September 10th an



tion Ltd. and production was resumed in June. Exploration for additional tungsten ore was extended to a study of the Jersey showing which was dominantly zinc bearing and by the end of 1948 a considerable tonnage of lead-zinc ore had been proven on the Jersey. The tungsten operation was closed down and the mill converted to a lead-zinc operation for production from the Jersey.

Early in 1951 the Canadian Government bought back from the company the known Emerald tungsten orebodies and the partly developed Dodger showing. An agreement was made for Canadian Exploration Ltd. to build a tungsten mill and to mine tungsten ore on a fee basis. A 250 ton mill was built near the portal of the Emerald 3,800 level and put into production in December 1951. Further diamond drilling on company ground demonstrated the existence of a large tonnage of tungsten ore so the company agreed to buy the tungsten operation from the Government. The mill operated until the end of 1958.

On the Emerald claim all ore was mined from above the 3,800 level main haulageway by open pitting and underground

Mineral Resources Branch, Department of Energy, Mines and Resources, Ottawa. see Card 2 ....

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#### HISTORY OF PRODUCTION

From 1944 to 1958, 1,067,431 tons of ore were shipped from this property. From this ore, 13,739,943 pounds of tungstic oxide were recovered.

## MAP REFERENCES

- Map 299 A, Salmo Sheet, B.C., (Geol.), Sc. 1":1 mile Accomp. Mem. 172.
- Map 1090 A, Nelson, B.C., (Geol.), Sc. 1":4 miles Accomp. Mem. 308.
- Map 1091 A, Nelson, B.C., (Mining Properties), Sc. 1": 4 miles Accomp. Mem. 308.
- Map 283 A, Salmo Sheet, B.C., (Topo.), Sc. 1:50,000.
- Map 1145 A, Salmo, B.C., (Geol.), Sc. 1":1 mile.
- Map 82 F/SW (MI), Trail, (Mineral Inventory), Sc. 1: 126,720, B.C. Dept. E, M. & Pet.

## REMARKS

# Comp./Rev. By JL Date 6-71 10-73 04-82

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- Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 319; 1970, p. 442; 1971, p. 401.

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### DESCRIPTION OF DEPOSIT (continued)

Scheelite occurs in three distinct associations: disseminated through pyrrhotite that invariably also contains some pyrite, quartz, and bictite; scheelite crystals fairly evenly distributed in quartz with a small amount of pyrrhotite, pyrite, and sericite; a molybdenum-bearing variety of scheelite occurring at argillite-limestone contacts in garnetite beds up to 3 feet thick.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued) mining. An inclined shaft was put down to the 2,730 level and 9 levels established off this, the bottom one 1,130 feet vertically below the 3,800 level. All ore was mined out above this lowest level. A small orebody on the Feeney claim was mined out by 1955. The mining of the Dodger zone was completed in 1957.

Diamond drilling on the Invincible claim revealed a tungsten orebody 800 to 900 feet below the surface that is estimated to contain 386,000 tons grading 0.83 per cent tungstic oxide. The sinking of a 900 foot vertical shaft was begun but the project was abandoned in 1958 on completion of a sales contract with the United States General Services Administration. Work was resumed on the property in 1967. A geophysical survey was made of the Invincible claim (Lot 12084) and 1,292 feet of diamond drilling was done in 2 holes in the Tungsten King workings. Drilling during 1968 on the Invincible showing totalled 9,432 feet. Development work was begun in 1969 and production began in mid-October 1970. The Emerald tungsten mill was rehabili-

tated to handle about 500 tons per day. Ore reserves at the end of 1970 from three separate zones totalled 480,000 tons averaging 0.65% WO3. Initial production was from the rehabilitated Dodger workings since the Invincible ore zone had not been reached. The Invincible drift was advanced to 4,300 feet during the year; the orebody was developed by a decline trackless haulageway. Mill capacity was increased to around 600 tons per day during 1971. The company name was changed in 1972 to Canex Placer Limited. Ore reserves were exhausted and the mine closed in August 1973 and in 1977, Canex's assets were acquired by Placer Development Limited. In 1979, Mentor Exploration and Development Co., Limited optioned the property from Placer. In 1980, they diamond drilled 14,777 feet in 11 holes plus one wedged hole. The best intersection was 0.36% WO3 over 3.5 feet.

West by Menter 1979-82 incl geoph & geochem surveys. The option was terminated Feb 10, 1982.