

PRODUCT

COPPER

PROVINCE OR  
TERRITORY

British Columbia

N.T.S. AREA 92 E/5

REF. 01

NAME OF PROPERTY **SENECA (LUCKY JIM) (HARRISON)**

LOCATION - small open pit.

Uncertainty: 200 metres.

Lat. 49°19'02"

Long. 121°56'37"

Mining Division **New Westminster**District **New Westminster**

County

Township or Parish

Lot

Concession or Range

Sec.

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

## DESCRIPTION OF DEPOSIT

The area is underlain by acid to intermediate volcanic rocks of the Harrison Lake Formation of Mid Jurassic age. These occur as an inlier within the Coast Intrusions. Quartz diorite, mapped as Upper Cretaceous or (?) older, outcrops about 1 mile to the west, along the west side of the Chehalis River. The volcanics are amygdaloidal and massive andesites with lenses of agglomerate. The agglomerate has fragments up to about 1 foot in diameter of thin-banded tuff, grey cherty material, and andesitic rock. The volcanics are pyritized to a varying degree over much of the outcrop area. Locally, narrow quartz-pyrite stringers are mineralized with pyrite, sphalerite, chalcopyrite, and minor galena. The main showing is a massive sulphide replacement of the volcanics near but not immediately adjacent to later intrusives. As exposed in a small pit the mineralization appears to be a replacement of tuffaceous (?) rock underlying an andesitic flow. Faulting is evident in several directions and may have exerted some control. A pronounced northwest trending, near vertical fault occurs near the pit. The

p.t.o. ....

Associated minerals or products of value - Zinc, silver, gold.

## HISTORY OF EXPLORATION AND DEVELOPMENT

This property is located at about the 900 foot elevation on the east side of the Chehalis River, about 5 miles north of Harrison Mills, some 50 miles east of Vancouver.

Information regarding early exploration work is very limited. Geological mapping was reported carried out by Cominco Ltd. in 1944 and by New Jersey Zinc Exploration Company (Canada) Ltd. in 1950. Noranda Exploration Company, Limited, is reported in 1951 to have drilled 443 feet in 12 shallow holes but little information was gained due to poor core recovery. In later years 31 recorded claims were held by Isaac Miller & associates of White Rock. A private company, Mac.-M. & H. Mining Co. Ltd. was incorporated in November 1960 to carry out exploration work. A drift was driven 470 feet during the period January to May 1961. Limited diamond drilling was reported and some ore was shipped from a small open pit. Work by Noland Mines, Limited, during 1964-65 included a reconnaissance self-potential survey, and diamond drilling in 2 holes totalling 925 feet. Mitsui Mining and Smelting Company, Limited, is reported to have conducted geological mapping concurrent with the work by Noland Mines.

Zenith Mining Corporation Ltd. optioned 55 full and 4 fractional claims from Isaac Miller in June 1970. Additional staking was done to a total of 104 claims, including the Lucky Jim, Harrison, Bonanza, Chehalis, Dorothy, and L.H. groups. Initial work by the company included induced potential, magnetometer, and soil geochemical surveys. The induced potential survey located an anomalous area 200 by 400 feet in the vicinity of the small pit. The initial diamond drilling of the anomalous area indicated a complex faulting of the mineralization. One of these holes intersected a 24.1 foot section grading 0.087 oz. gold and 2.41 ounces silver a ton, 1.12% copper, and 9.77% zinc. The diamond drilling failed to establish a vertical dimension to the mineralized zone.

Cominco Ltd. optioned the property from Zenith Mining in April 1971. Exploration work was then directed to the establishment of a lateral rather than vertical dimension to the mineralization. Work during 1971 included geological mapping, geochemical rock and soil surveys, an induced potential survey on Harrison 1 and 3, and 2,497 feet of surface diamond drilling in 6 holes on Lucky Jim and Harrison 1, 2, 15, and 1 Fr. claims. In 1972 a further 9,800 feet of diamond drilling in 8 holes was carried out. During 1973 further geological mapping and a geochemical soil survey (about 300 samples)

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

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## HISTORY OF PRODUCTION

In 1962, 287 tons of ore were shipped from this property. From this ore 17 ounces of gold, 959 ounces of silver, 7,118 pounds of copper, and 40,657 pounds of zinc were recovered.

### MAP REFERENCES

Map 12-1969, Hope (West Half), (Geol.), Sc. 1":4 miles -  
accomp. Paper 69-47.

Map 737 A, Hope, (Geol.), Sc. 1":4 miles. (1942).

\*Map 92 H/5 W, Harrison Lake, (Topo.), Sc. 1:50,000.

Geology of an area southwest of Harrison Lake, Sc. 1":  
4,400 ft., Fig. 12 - accomp. Geology, Exploration, and  
Mining, 1973, British Columbia Dept. of Mines.

#Geology of Seneca Area, Sc. 1":250 ft., Fig. 13 - accomp.  
Geology, Exploration, and Mining, 1973, British  
Columbia Dept. of Mines.

### DESCRIPTION OF DEPOSIT (continued)

mineralization, which appears to dip moderately northeasterly,  
is terminated by the fault.

## REFERENCES

Mineral Development Sector; Corporation Files: "Zenith  
Mining Corporation Ltd."

Reports of Minister of Mines, British Columbia: 1961,  
p. 88; 1962, p. 93.

Monger, J.W.H.; Hope Map-Area, West Half, British  
Columbia; Paper 69-47, p. 67, Geol. Surv. of  
Canada.

Geology, Exploration, and Mining; British Columbia Dept.  
of Mines: 1971, p. 265; 1972, p. 102 + ; 1973,  
p. 125 ++ .

### HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

was carried out over all claims. Surface diamond drilling  
totalling 1,292 feet in 5 holes was done on Lucky Jim, C 8,  
and Harrison 1 claims.

BCI - 92 H/SW - 13

JAN 1972  
JAN 1976