

NAME OF PROPERTY

HORN SILVER

LOCATION -Center of Horn Silver claim (Lot 1928).

Lat. 49°03'30" Long. 119°41'20"

Radius of uncertainty - 50 metres.

Mining Division Osoyoos

District Similkameen

County

Township or Parish

Lot

Concession or Range

Sec.

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

Dankoe Mines Ltd.

DESCRIPTION OF DEPOSIT

The property lies in the Kruger syenite which forms a band about 1 mile wide which is bordered on the north and east by the Carboniferous (?) Kobau group of quartzites, schists, and greenstones, and on the south and west by a large mass of younger granodiorite of the Nelson intrusives. The deposit occurs in a shear zone in a highly mafic monzonite phase of the Kruger syenite of Jurassic age. The controlling structure is a shear zone some 80 feet wide which strikes N85°W and dips 40°S. Lenticular quartz veins striking N60°W and dipping 35° southwest occupy tension fractures in the shear zone and are in echelon to the left. The quartz bodies are displaced by fractures striking north-south and northeastward. Observed displacements are of a few inches to a few feet only. The quartz veins are up to 5 feet wide, and are often sheeted. They are mineralized with galena, argentite, tetrahedrite, pyrite, and chalcopyrite. Native silver, cerargyrite, and pyrargyrite are reported. The metallic minerals commonly occur in bands in the quartz, usually near the walls. Up dip the main

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Associated minerals or products of value-Gold, zinc, lead, copper.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the west slope of Richter Mountain, 12 miles southeast of Keremeos.

The showing was staked in 1901 by Joseph Hunter and shortly afterwards passed into the hands of Dr. I.W. Powell, of Victoria. The Horn Silver claim (Lot 1928) was Crown-granted to Dr. Powell in 1909. Only limited assessment work was carried out during this period. The heirs of Dr. Powell arranged an agreement with E.W. Condit and development work began in 1914. By 1922 management of the property had passed to P.W. Powell as a lien for non payment of wages had been placed against the property, which then comprised 7 claims and fractions, the Horn Silver 1-3, Annex, Silver Plate, Golden Horn, and Silver Bell.

In 1924 the property was optioned by Alaskan interests, reportedly under the name British American Mining Corporation. The company name was reported changed to Horn Silver Mining Corporation, Head Office Ketchikan; this company was registered in British Columbia in 1925. A new company, Horn Silver Mining Corporation, Limited, was incorporated in British Columbia in April 1926. Development work was carried out and a 22 ton per day mill put into operation in June 1926; work ceased later in the year. The property was transferred to a new company, Night hawk Mines Limited, which was incorporated in February 1927; the company name was changed to Big Horn Silver Mines Limited, and finally, in November 1927, to Big Horn Mines Limited. Exploration work resumed in 1927 and continued until September 1928. The company held the adjacent Woodrow and Silver Glance claims.

Vancouver interests were reported to have optioned the property in 1929 and limited exploration work was carried out. In 1933 Madison Oils Limited reportedly held an option on the claims but no work was reported.

Canada Radium Corporation Limited optioned the Horn Silver (Lot 1928) and Silver Bell (Lot 2393) Crown-grants and 7 recorded claims, the Silver Bell 1-5, 7-8, in October 1957 from G.F. Ramsey, V. Tishhauser, and H. Graham, of Keremeos. The adjacent Horn Silver No. 2 claim was owned at that time by E. Bromley & associates. Exploration and development work was carried on until September 1959 and included some 550 feet of drifts and raises, and 1,721 feet of diamond drilling in 9 holes. The company name was changed in 1963 to Santos Silver Mines Limited and limited diamond drilling was carried out.

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HORN SILVER

DESCRIPTION OF DEPOSIT (continued)

structure intersected a chloritized shear striking subparallel and dipping about 10° northward. The shear carries feldspar, carbonate, and sulphides, but no quartz. Associated with the shear are thin mineralized fractures containing high silver values. A silver-bearing vein, called the "H" vein, was discovered at the mill site and from projection could be part of the mine structure. It was opened by an adit on the 1,700 level and, according to a company announcement, the first 150 feet of drift averaged 50 ounces silver and 0.22 ounce gold per ton over mining widths.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Utica Mines Ltd. acquired a controlling interest in Santos Silver in 1964 and the property was expanded to 43 claims. Exploration work began in a new adit and during 1964-65 totalling 12,383 feet of crosscutting, drifting and raising. The working at that time consisted of 4 main levels designated 2,400, 2,600, 2,800, and 3,000, with 2,600 the main operating level. The 2,800 is an old adit at the west end of the structure. The 3,000 adit is at the eastern end at the Bromley showing (Horn Silver No. 2 claim).

A 300 ton per day mill was erected and mill tune up operations began in August 1967; mill capacity was subsequently raised to 400 tons per day; a new adit was begun at the 2,200 level in 1969 and extended to a length of about 2,000 feet in 1970. Milling operations continued until March 1970 when the mine closed. Measured and indicated reserves as of December 31 1969, were reported as 163,740 tons averaging 9.0 ounces silver per ton.

The company name was changed in September 1971 to Dankoe Mines Ltd. Production resumed in March 1974 in the 125-175 ton-per-day range. From August 1975 to June 1976 the mill was under contract to mill ore from the Dusty Mac property at Okanagan Falls; the milling of Dankoe ore resumed in June 1976. During this period Dankoe focused on underground development. Development to date on 4 adit levels (2600, 2500, 2400, and 2200) and 3 sublevels totalled about 7.5 miles. In the summer of 1977 a geochemical soil survey, and a scintillometer survey for uranium, were carried out over claims surrounding the mine. A new 1750' level drift adit begun late in 1977 was completed to a length of 4,000' and levels established between 1,700' and 2,200' by late 1979. In 1980, a 400 foot incline was driven from the 1,900 level to 2,100 level and 450 feet of drifting and 600 feet of raising done. In 1981, exploration was done on 3,000 and 4,000 foot levels and work continued on the 1,900 and 2,200 levels. At the beginning of 1982, developed ore reserves were 50,000 tons containing 290,000 ozs Ag. (CMH 1982-83, p. 107). In Aug. 1981, operations were temporarily suspended.

HISTORY OF PRODUCTION

During the period 1915-1970, inclusive, 266,025 tons of ore were milled. From this ore 6,065 ounces of gold, 2,424,472 ounces of silver, 131 pounds of copper, 421,881 pounds of lead, and 452,078 pounds of zinc were recovered.

In 1974, 24,351 tons of ore were milled. From this ore 440 ounces of gold, 218,939 ounces of silver, 9,432 pounds of copper, 35,229 pounds of lead, and 24,464 pounds of zinc were recovered.

During the period 1975-78 inclusive 99,513 tonnes of ore were milled. From this ore 69.511 kg of gold, 31,396.604 kg of silver, 15,644 kg of copper, 73,903 kg of lead and 85,317 kg of zinc were recovered.

In 1979, operations were at a capacity of 300-400 tpd and there were milled 28,149 tons to produce 195,628 ozs Ag, 603 ozs Au, 38,777 lbs Pb, 48,679 lbs Zn. In 1980 milled 40,700 tons to produce 111,240 ozs Ag, 233 ozs Au, 43,700 lbs Pb, 14,700 lbs Zn. The 1979 and 1980 statistics include quantities that were custom milled. (CMH 1982-83, p. 107).

REFERENCES

- McKechnie, N.D.; Horn Silver; Report of Minister of Mines, British Columbia, 1960, pp. 58-60.
- Bostock, H.S.; Horn Silver Mine; Summary Report 1927, Pt. A, pp. 47-52, Geol. Surv. of Canada.
- Stephens, F.H.; Utica Mines Ltd.; Western Miner, August 1967, pp. 39-48.
- Reports of Minister of Mines, British Columbia: 1909, p. 278; 1915, pp. 202, 205; 1916, p. 259; 1917, p. 207; 1918, p. 211; 1919, p. 169; 1920, p. 156; 1921, pp. 178, 267; 1922, p. 164; 1924, p. 170; 1925, p. 209; 1926, p. 215; 1927, p. 237; 1928, pp. 258, 433; 1929, p. 268; 1933, p. 167; 1958, p. 32; 1963, p. 65; 1964, p. 102; 1965, p. 162; 1966, p. 190; 1967, pp. 219-221; 1968, p. 221.
- Geology, Exploration and Mining; British Columbia Dept. of Mines: 1969, p. 297; 1970, p. 394; 1973, p. 43; 1974, p. 53.
- Mineral Policy Sector; Corporation Files: "Big Horn Mines Limited"; "Santos Silver Mines Limited"; "Dankoe Mines Ltd."

MAP REFERENCES

Map 538 A, Kettle River, (Geol.), Sc. 1":4 miles.

Map 15-1961, Kettle River, (Geol.), Sc. 1":4 miles.

Map 749 G, (Aeromag.), Sc. 1":4 miles.

*Map 82 E/4 E, Keremeos, (Topo.), Sc. 1:50,000.

REMARKS

APR 1973
JUNE 1980 DM
DEC 1982 JI