

NAME OF PROPERTY

TORIC (TORBRIT)

OBJECT LOCATED - Toric claim (Lot 935).

UNCERTAINTY IN METRES 300. Lat. 55°41'15" Long. 129°30'20"

Mining Division Skeena District

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

Dolly Varden Minerals Inc.

DESCRIPTION OF DEPOSIT

The mineralization, found mainly on the Toric claim, occurs in a massive, irregular-shaped quartz-barite body replacing a folded area in a series of Jurassic volcanic breccias, tuffs, and flow rocks of the Hazelton group.

A series of parallel, nearly vertical, fine-grained basic dykes cut across the formation at right angles to the strike of the mineralization over a horizontal distance of 140 feet.

Cutting the mineralized zones are several faults which, according to information so far available, have resulted in horizontal displacements in the order of 30 feet. There are also numerous smaller faults.

The quartz-barite apparently apexes before reaching surface except for two or three narrow tails which outcrop in Kitsault canyon and probably led to the original discovery.

The whole of the quartz-barite vein material, which ranges up to several hundred feet wide in places, carries silver values but commercial grade is confined to lenses and shoots where there have been more than usual concentrations of native silver

see Card 2

Associated minerals or products - Lead, zinc, barite.

HISTORY OF EXPLORATION AND DEVELOPMENT

The Toric property is located at the 1,000 foot elevation on the east side of the Kitsault River about 14 $\frac{1}{4}$ miles north of the community of Alice Arm. The camp and concentrator used in the 1950's were located on the west side of the river about 3,000 feet south of the mine, the two being connected by a narrow-gauge railway. The Toric is adjoined on the north by the Tiger group and on the west by the North Star group.

Three claims, the Anglo, Toric and Moose were located by John and Gus Strombeck in about 1916; a fourth claim, the Lamb, was staked a year or so later. These claims (Lots 934-937 respectively) were Crown-granted to the Strombeck Bros. and Al Miner in 1925. Exploration and development work by the owners was done in open cuts and 3 adits.

The Consolidated Homestake Mining and Development Company, Limited bonded the property in August 1924 and crosscutting and drifting was begun on the 1,150 level. The company name was changed in 1926 to Toric Mines Company, Limited. A 50 ton per day mill was completed in 1927 but trial runs showed it was not suited to the ore; flotation units were installed early in 1928 and during the following year about 2,000 tons of ore were treated.

Britannia Mining and Smelting Co., Limited optioned the property from Toric Mines Company early in 1929. A new company Torbrit Mining Company, Limited was formed in November 1929 to hold and develop the property. Interest in the new company was held by Britannia (75%), and Toric Mines Company (25%). A program of underground development work and diamond drilling was begun in 1929 and continued until April 1930, when operations were suspended due to low prices of metals. The mine remained idle until 1946.

In the latter half of 1946 The Mining Corporation of Canada, Limited purchased the property from Torbrit Mining Company and a new company, Torbrit Silver Mines, Limited was formed to operate the mine; the vendors received 1/3 of the issued shares of the company. The company drove the 1,000 crosscut adit level and built a 300 ton per day mill; the mill rate was subsequently boosted to 400-450 tons per day. The mill operated from February 1949 until September 1959, when the mine was closed. The orebody has been developed by three adit levels at approximately 1,300, 1,150, and 1,000

see Card 2

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa

509408

HISTORY OF PRODUCTION

From 1928 to 1959 inclusive, 1,379,372 tons of ore were milled at this property. From this ore 111 ounces of gold, 18,646,304 ounces of silver, 10,732,873 pounds of lead, and 623,991 pounds of zinc were recovered.

MAP REFERENCES

Map 307 A, Portland Canal Area, (Geol.), Sc. 1":4 miles - accomp. Memoir 175.

Geology of Upper Kitsault Valley Area, Sc. 1":2,250 ft., Fig. 1, Report of Minister of Mines, British Columbia, 1951, p. 79.

#Map 103 P/12, Hastings Arm, (Topo.), Sc. 1:50,000.

Geology of the Dolly Varden property, Fig. 50-1, Geological Fieldwork 1985, p. 328.

REMARKS

REFERENCES

Reports of Minister of Mines, British Columbia:

1916, p. 78; 1918, p. 58; 1919, p. 54; 1920, p. 47; 1921, p. 53; 1922, p. 59; 1923, p. 60; 1924, p. 55; 1925, pp. 76, 359; 1926, p. 84; 1927, p. 75; 1928, p. 87; 1929, p. 86; 1930, p. 94; 1947, p. 94; 1948, pp. 71-75⁺; 1949, p. 75; 1950, p. 79; 1951, p. 102⁺⁺; 1952, p. 77; 1953, p. 90; 1954, p. 83; 1955, pp. 19, 20; 1956, p. 19; 1957, p. 7; 1958, p. 6; 1959, p. 8; 1962, p. 9; 1966, p. 42; 1967, p. 41.

Hanson, George; Portland Canal Area, British Columbia; Memoir 175, p. 83, Geol. Surv. of Canada, 1935.

Eardley-Wilmot, V.L.; Silver Producing Mines in British Columbia; Mineral Policy Sector, File MR-AG-301.00, British Columbia.

⁺⁺⁺Cormie, A.M.; Mining Methods at Torbrit Silver Mine; The Canadian Institute of Mining and Metallurgy, Bulletin, Vol. 44, No. 470, p. 399, 1951.

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy; 1927, Rept. 695, pp. 119-122 (No. 278); July-December 1935, Rept. 771, pp. 155-161 (No. 656).

Mineral Policy Sector; Corporation Files: "Toric Mines Company, Limited"; "Torbrit Mining Company, Limited"; "The Mining Corporation of Canada, Limited"; "Torbrit Silver Mines, Limited"; "Dolly Varden Resources Limited".

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 60; 1978, p. E 238.

Exploration in British Columbia; BCDM: 1980, p. 409.

Dawson, G.L. and Aldrick, D.J.; Geology and Mineral Deposits of the Kitsault Valley; Geological Fieldwork 1985, p. 219, BCDM.

Devlin, B.D. and Godwin, C.I.; Geology of the Dolly Varden Camp Alice Arm Area; Geological Fieldwork 1985, p. 327, BCDM.

Comp./Rev. By	DMacR	JL	DMacR	DMacR			
Date	3-79	09-82	05-82	08-86			

NAME OF PROPERTY

TORIC (TORBRIT)

DESCRIPTION OF DEPOSIT (continued)

and silver-bearing minerals. The ore-bearing structure plunges at approximately 25 degrees along an axis striking roughly N65°W. The dip varies from 35 to 40 degrees to the northeast except at the apex of the body, where it steepens to nearly 90 degrees. The commercial grade shoots vary greatly in width and length, ranging from 10 to 80 feet wide and from 200 to 400 feet in horizontal length.

The replacement deposit is composed principally of hematite, barite, quartz, jasper, and carbonates, and a small amount of incompletely replaced country rock. It includes a small proportion of pyrite and galena, and a smaller proportion of native silver, sphalerite, chalcopyrite, and possibly of other metallic minerals. The mineralization is arranged in bands from a few inches to several feet in width that are subparallel to the contacts and to the schistosity in the walls. The mineralization extends down dip for more than 500 feet and fingers out towards the west and east.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

foot elevations, the latter being the main haulageway. A shaft was sunk from the surface to the 800 level and a winze from the 800 to the 700 level. During 1955-57 inclusive a total of 9,680 feet of diamond drilling was done on the "upper showings" which are silver-bearing veins on the Moose and Lamb claims; results were unfavourable and the project was abandoned.

Dolly Varden Mines Ltd. acquired the Torbrit mine, mill and equipment in 1961 under an option agreement. The Sunshine Mining Company, of Spokane, held an option on the Dolly Varden properties from January 1964 to September 1965, however no work was reported. Dolly Varden Mines carried out some underground work in 1966.

Newmont Mining Corporation of Canada Limited optioned the Dolly Varden Mines holdings in February 1967. Work included geological mapping, and airborne and ground magnetic surveys over the main claims; the option was dropped at the end of the year. Bralorne Can-Fer Resources Limited optioned the Dolly Varden properties in October 1969; work was confined to the Wolf property and the option expired in April 1970. Dolly Varden Mines Ltd. in 1971 reported the proven, probable, and possible reserves at 866,812 tons averaging 9.10 ozs silver per ton, 0.42% lead, and 0.50% zinc (Dolly Varden Mns L, 1971 AR).

The company name was changed in November 1975 to Silver Dolly Resources Ltd., in October 1976 to Dolly Resources Ltd., and in April 1977 to Dolly Varden Resources Limited, 95% owned by Yorkshire Resources Limited. A geochemical survey was carried out over the property in 1978.

In 1979, by a process of amalgamation the name of the company was changed to Dolly Varden Minerals Inc. The amalgamating companies were: Yorkshire Resources Limited, Dolly Varden Resources Limited, Yorkshire Copper Mines Limited, Kitsault Silver Mines Ltd. and Copper Cliff Mines Ltd. Work during 1980-81 included rehabilitation of 684 m of adit and 46 m of shaft.