

NAME OF PROPERTY

MAMIE

OBJECT LOCATED - Upper adit.

UNCERTAINTY IN METRES 100.

Lat. 54°46'55" Long. 127°21'

Mining Division Omineca

District Coast, Range 5

County

Township or Parish

Lot

Concession or Range

Sec

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

Lower and (?) Mid Jurassic, massive, finely crystalline tuffs and andesite flow breccias containing fragments over an inch in diameter, form the country rock in the vicinity of the "vein". These rocks range from dark grey to light grey, and adjoining the "vein" have been altered and bleached.

The "vein" is a sheared zone carrying sphalerite and arsenopyrite with a little chalcopyrite and, rarely, some galena. Parts of the zone are brecciated and consist of small, angular rock fragments cemented and partly replaced by the sulphides.

The zone strikes north 65 degrees east and dips about 80 degrees southeast. It is exposed by stripping for 300 feet along its strike up an 18-degree slope between elevations of 4,444 and 4,540 feet. In this distance it ranges from 2 to 8 feet in width. At the lower end it carries more than 50 per cent of sulphides across 7 feet. In the upper adit the zone ranges from 6 feet in width at the No. 1 winze to 3.6 feet at a point 200 feet from the portal. It contains up to 80 per cent

see Card 2

Associated minerals or products of value - Silver, zinc, copper.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on Henderson Creek, at elevations of 4,300-5,500 feet, on the southwest side of Hudson Bay Mountain, 7 miles west of Smithers.

The Mamie, Evenrude, and Lone Cedar Fraction claims were owned by J.A. Aldrich, of Smithers, from about 1911. Initial exploration work was done in a 20 foot shaft, and open cuts which traced the vein for 400 feet. The claims were optioned in the fall of 1917 to C.H. Sproat. A drift adit (upper adit) was only begun when the option was given up.

J.F. Duthie, of Seattle, optioned the property in 1919. Work in extending the upper adit, at 4,427 foot elevation, was carried on from late in 1919 until about March 1920. Further work in 1921 and 1922 included extending the upper adit to a length of 165 feet and sinking two winzes to depths of 33 and 42 feet. A new crosscut adit, 587 feet lower than the drift adit, was begun and driven about 200 feet before work ceased.

In July 1923 Mr. Duthie sold a 55% interest in the nearby Henderson property to the Federal Mining and Smelting Company, of Wallace, Idaho, a subsidiary of the American Smelting and Refining Company. Under the terms of the agreement a new operating company, Duthie Mines, Limited, was incorporated in British Columbia in December 1923. The option on the Mamie property was apparently transferred to the company. Work on the Mamie property began in August 1923. A new adit, started 154 feet below the upper adit, was driven about 660 feet to a position nearly below the No. 1 winze in the upper adit. Work ceased in August 1924 and the option was abandoned.

The Mamie, Evenrude, and Florence claims (Lots 7262-7264, respectively) were Crown-granted in 1931 to Charles Reid and L.S. McGill, Executors and trustees of the Estate of J.A. Aldrich. In 1934 the claims were optioned to W.R. Wilson and Sons. Work during 1934-35 included open cutting, and extending the drift adit to a length of 218 feet. A small amount of ore was shipped to the Dept. of Mines Sampling Plant at Prince Rupert in 1941 under the name J.J. Herman, who was apparently associated with Smithers Mines, Limited, operators of the nearby Henderson property.

Sil-Van Consolidated Mining and Milling Company, Ltd., incorporated September 1950, acquired the Mamie property.

see Card 2

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

120067

HISTORY OF PRODUCTION

In 1941, 14.37 tons of ore were shipped to the Dept. of Mines Sampling Plant at Prince Rupert. This ore averaged 0.97 ounce gold per ton, 4.10 ounces silver per ton, 0.90% copper, and 11.2% zinc. (Report of Minister of Mines, British Columbia, 1941, p. 41).

MAP REFERENCES

Map 69-1, Smithers, Hazelton, and Terrace Areas, (Geological compilation), Sc. 1":4 miles, British Columbia Dept. of Mines.

Geology of Hudson Bay Mountain, Sc. 1":5 miles, Fig. 9, Summary Report 1925, Pt. A., Geol. Surv. of Canada.

#Plan of workings, Henderson-Mamie Group, Sc. 1":1,100 ft., Report of Minister of Mines, British Columbia, 1922, p. 108.

Plan of workings, Sc. 1":150 ft., Fig. 5, Economic Geology Series No. 4.

Map 5319 G, Smithers, (Aeromag.), Sc. 1":1 mile.

*Map 93 L/14, Smithers, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR	DMacR				
Date	1-76	1-79	08-86				

REFERENCES

+Kindle, E.D.; Mineral Resources, Hazelton and Smithers Areas, Cassiar and Coast Districts, British Columbia; Memoir 223 (Revised Edition), p. 114, Geol. Surv. of Canada.

Reports of Minister of Mines, British Columbia: 1911, p. 118; 1917, p. 113; 1919, p. 103; 1921, pp. 107, 272; 1922, p. 107; 1923, p. 108; 1924, p. 96; 1934, p. C 7; 1935, p. C 35; 1950, p. 100; 1951, p. 112; 1952, p. 93; 1953, p. 93; 1963, p. 25.

Hurst, M.E.; Arsenic-Bearing Deposits in Canada: Economic Geology Series No. 4, p. 40, Geol. Surv. of Canada, 1927.

Jones, R.H.B.; Geology and Ore Deposits of Hudson Bay Mountain, Coast District, B.C.; Summary Report 1925, Pt. A., p. 132, Geol. Surv. of Canada.

Lode Gold Deposits of British Columbia, compiled by John D. Galloway; Bulletin 1, 1932, p. 52, British Columbia Dept. of Mines.

Kerr, F.A.; Mineral Resources Along the Canadian National Railway, Between Prince Rupert and Prince George, British Columbia; Paper 36-20, p. 83, Geol. Surv. of Canada.

Mineral Policy Sector; Corporation Files: "Dorita Silver Mines Ltd."; "Silver Standard Mines Limited".

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy, 1935, No. 771 (Invest. #657), pp. 162-169.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1973, p. 347.

George Cross News Letters: 1985, No. 244; 1986, No. 30.

PRODUCT

GOLD

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 93 L/14

Card 2 -
REF. AU 1

NAME OF PROPERTY

MAMIE

DESCRIPTION OF DEPOSIT (continued)

arsenopyrite and sphalerite across several feet in the richest looking parts of the vein. In the lower adit (4,275 level) there are several, small, parallel zones over a width of 30 or 40 feet. In general the mineralization is weak in comparison with that in the upper adit.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Work during 1950-51 included some 800 feet of drifting and crosscutting on the 4,427 level (upper adit), 458 feet of drifting on the 4,275 level adit, and 395 feet of raising. Indicated reserves were reported at 61,000 tons averaging 0.32 ounce gold and 3.0 ounces silver per ton, 7.6% zinc, and 0.7% Cu (Sil-Van Ms L AR 1964).

Silver Standard Mines Limited acquired a 36½ per cent interest in Sil-Van Consolidated in return for development work on the Henderson property, which was carried out under a March 1957 agreement. Also, under the terms of the agreement, the company name, Sil-Van Consolidated, was changed in May 1957 to Sil-Van Mines Limited. During 1963 an electromagnetic survey was carried out in an attempt to find an extension of the Mamie vein, and 250 feet of diamond drilling was done in 4 holes. The company name, Sil-Van Mines, was changed in 1969 to Dorita Silver Mines Ltd. At that time Silver Standard Mines Limited held 45% of the issued shares of the company.

Claims of the M group, adjoining the Florence claim on the east were staked by American Metal Climax, Inc., in about 1958 as part of their Glacier Gulch molybdenum property. Operations were transferred to a wholly owned subsidiary Climax Molybdenum Corporation of British Columbia, Limited. Surface geological mapping was carried out on the Florence claim in 1973.

Silver Standard Mines Limited in 1977 sold its controlling interest in Dorita Silver Mines Ltd. to Toronto interests. Dorita in 1978 sold all of its mineral properties to Silver Standard Mines Limited; the latter company name was changed in 1984 to Consolidated Silver Standard Mines Limited. In 1985 some 4,000' of diamond drilling in 7 holes was carried out to test the continuity of the mineralized zone on strike and down dip; this did not significantly alter the reserves. Mineralogical studies were in progress to try and improve gold recoveries in concentrates, a problem that has hindered development.