

NAME OF PROPERTY	SILVER STANDARD
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OBJECT LOCATED—adit at 1,500' elevation.

UNCERTAINTY IN METERS 200. Lat. 55°18'55" Long. 127°37'35"

Mining Division	Omineca	District	Cassiar
County		Township or Parish	
Lot		Concession or Range	
Sec	Tp.	R.	

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The country rock at the Silver Standard property consists mainly of tuffaceous sandstone of the Hazelton group. These rocks form a low anticline with the axial plane striking north. A small granitic intrusion cuts the Hazelton group about 900 feet south of the mine portals and lies just to the south of most of the major ore shoots. On the east side of the property a post-vein fault which dips 40°W divides the property into an east and a west block. Ore has been mined from the main vein system of 16 parallel quartz veins ranging in width from a fraction of a foot to 12 feet. The veins strike northeastward and dip from 40 to 80° southeast. The distance across the vein system from west to east is about 1 mile. Surface drilling in 1955 located a new vein designated No. 11 cross-vein and its faulted extension No. 10 cross-vein. The vein strikes N37°W and dips 25° northeast.

see Card 2 ....

Associated minerals or products of value - Zinc, lead, gold, copper, cadmium.

HISTORY OF EXPLORATION AND DEVELOPMENT

The Silver Standard mine is located on the northwest slope of Glen Mountain, 4¼ miles north-northeast of Hazelton.

The showings were staked in 1910 by Messrs. Long and McBain who developed them for a short time. The Silver Standard and Canadian King groups of 6 claims each were acquired in 1911 by the Stewart, McHugh, and McLeod syndicate on a lease with option to purchase. In 1913 a total of 14 claims (Lots 2409-2415, 2417, 2259-2264) were Crown-granted to the syndicate. Steady development work was carried on except for a period in 1914-15 when the mine was closed due to war conditions. A 50 ton mill of the water concentrator type was completed in May 1918 and operated intermittently until October 1920, and for about 3 months in 1922.

The syndicate formed Silver Standard Mining Company Limited in April 1937, this being a private company largely owned by Major General J.W. Stewart. The mine remained inactive until May 1938 when rehabilitation of the workings was begun by Canadian Cadillac Gold Mines Limited; operations were suspended early in 1939 due to lack of funds. Omineca Base Metals, Limited, held the property in 1943 but no development work was reported at that time.

No further activity was reported until Silver Standard Mines Limited was organized (December 1946) to acquire from the Silver Standard Mining Company Limited the 14 Crown-granted claims and 24 claims held by location. Exploration and development work was begun and a 60-75 ton per day flotation mill was built and put into operation in September 1948. The mine was developed by two crosscut adits driven southeastward on the 1,500 and 1,300 levels, and by a 510-foot vertical shaft from the 1,300 level with crosscuts on the 1,150, 1,000, and 850 levels. A biogeochemical survey in 1953 located several anomalies but no ore shoots were found by subsequent exploration work. A geophysical (resistivity) survey was carried out over approximately 470 acres, extending in all directions beyond the mine workings and beyond any previous surface stripping. A large number of anomalies were found which on investigations were found

see Card 2 ....

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## HISTORY OF PRODUCTION

From 1913 to 1970, inclusive, 218,399 tons of ore were milled at this property. From this ore 14,662 ounces of gold, 7,465,885 ounces of silver, 444,401 pounds of copper, 17,144,037 pounds of lead, 26,678,155 pounds of zinc, and 335,581 pounds of cadmium were recovered.

## MAP REFERENCES

- #Surface Geology, Glen & Nine Mile Mountains Area, Fig. 1, Report of Minister of Mines, B.C., 1950.
- Map 971 A, Smithers-Fort St. James, (Geol.), Sc. 1": 8 miles.
- \*Map 93 M/5 E, Hazelton, (Topo.), Sc. 1:50,000.
- Map 1733, Principal Veins on the Silver Standard Mine - accomp. Memoir 110.

## REMARKS

Comp./Rev. By			DMacR				
Date	7-66	3-73	2-75				

## REFERENCES

- Black, J.M.; Glen and Nine Mile Mountains Area; Report of Minister of Mines, B.C., 1950, pp. 82-95.
- Kindle, E.D.; Mineral Resources, Hazelton and Smithers Areas, Cassiar and Coast Districts, British Columbia; Memoir 223, pp. 28-35, Geol. Surv. of Canada, 1940.
- Reports of Minister of Mines, British Columbia: 1911, pp. 81, 99; 1912, pp. 112, 116; 1913, p. 105; 1914, pp. 171, 194-197; 1915, p. 76; 1916, pp. 119, 437; 1917, p. 106; 1918, p. 115; 1919, p. 101; 1920, p. 84; 1921, p. 97; 1922, p. 98; 1938, pp. C3, C49; 1947, p. 97; 1948, p. 77; 1949, p. 82; 1951, p. 109; 1952, p. 85; 1953, p. 92; 1954, p. 85; 1955, p. 22; 1956, p. 23; 1957, p. 9; 1958, p. 9; 1960, p. 13; 1962, p. 15; 1967, p. 84; 1968, p. 111.
- O'Neill, J.J.; Preliminary Report on the Economic Geology of Hazelton District, British Columbia; Memoir 110, pp. 27-32, Geol. Surv. of Canada, 1919.
- Malloch, G.S.; Metalliferous Deposits in the Vicinity of Hazelton, B.C.; Summary Report 1912, p. 105, Geol. Surv. of Canada.
- Mineral Development Sector; Corporation Files: "Silver Standard Mining Company Limited"; "Canadian Cadillac Gold Mines Limited"; "Omineca Base Metals, Limited"; "Silver Standard Mines Limited".
- Smith, Alexander; Silver Standard Mine; Structural Geology of Canadian Ore Deposits, Vol. 2, pp. 20-27, Canadian Institute of Mining and Metallurgy, 1957.
- Mines Branch, Ottawa; Investigation No. MD 2740, Report of the Mineral Dressing and Process Metallurgy Division, 1951.
- Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy, 1937, No. 785, p. 151.
- Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 98.

## NAME OF PROPERTY

## SILVER STANDARD

## DESCRIPTION OF DEPOSIT (continued)

The ore consists of banded and massive galena, sphalerite, and tetrahedrite, with associated pyrite and arsenopyrite in a quartz gangue. Minor amounts of chalcopyrite, tennantite, jamesonite, and calcite also occur. The ore carries a high silver content with an appreciable gold content in some of the veins. The gold is associated with arsenopyrite, whereas the silver values occur wherever the galena and sphalerite are found.

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

to include minor veins, known shears, shears containing pyrite, and beds of argillite; no new orebodies were found. Approximately 10,000 feet of bulldozer stripping was done in 1955. Half of this was in a single trench the same distance south of the intrusions as the major ore shoots are north; nothing of importance was found.

All underground work by the company ceased in May 1958 with the completion of mining on the No. 11 and No. 10 cross-veins. All known ore shoots had been mined and considerable underground exploration and development work was done in an effort to find additional reserves. Lessees mined and shipped small remnants of high grade ore during the period 1959-1965.

National Exploration, Limited, in 1950 acquired 60 recorded claims, lying below the 1,500 foot elevation, some southwest and others northeast of the Silver Standard property. Geophysical surveys located 2 anomalies, one on each claim group. Diamond drilling of the anomalies in 1951 located some quartz veins but no intersections contained economic mineralization.

The Silver Standard claims were leased by Northwestern Midland Development Co. Ltd. and mining of remnants of faulted ore sections was begun in 1967. In 1968 a total of 55 feet of drifting was done on No. 2 and No. 10 veins. Two hundred and one tons of selected high-grade ore was shipped and 560 tons was mined and milled. Work during 1969 included 85 feet of subdrifting on No. 10 vein, and 210 feet of diamond drilling in 6 holes. One thousand and fifty tons of ore were mined and 884 tons milled.

*See also file 1973-1000*