

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

MARTHA ELLEN (HERCULES)

OBJECT LOCATED - Martha Ellen claim (Lot 1521).
OBJET LOCALISÉ

UNCERTAINTY 300 m
FACTEUR D'INCERTITUDE

Lat. 56°07'50" Long. 130°02'
Lat. Long.

Mining Division Skeena District
Division minière Cassiar

County Township or Parish
Comté Canton ou paroisse

Lot Concession or Range
Lot Concession ou rang

Sec. Tp. R.
Sect. Ct. R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

Rocks in the area are gently to moderately westward dipping Hazelton Group andesitic volcanics of Jurassic age. Three stratigraphically controlled sulphide horizons have been identified within the andesitic host rocks. The Martha Ellen zone occurs in the middle horizon and has been traced for more than 2,000' along strike. It has a higher base metal content than the other known zones, which occur on the Big Missouri mine property. Drill hole 82-51 for example cut 48' at 0.171 oz/t Au, 2.13 oz/t Ag, 0.32% Cu, 1.35% Pb, 4.35% Zn.

HISTORY OF EXPLORATION AND DEVELOPMENT
HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

This property is located at about 3,500 foot elevation on the south slope of Mount Dilsworth. The Tip Top claim, the end claim of the northwesterly trending Big Missouri group adjoins on the south. The Big Missouri mine lies about 1 mile to the southeast.

The Martha Ellen, Glacier, Cornelius, and Empire claims (Lots 1521-1524) were bonded in about 1909 by the Salmon Glacier Mining Company. The company was reorganized in 1910 under the name Hercules Mines Ltd.; this was apparently an American company. Some work was done in open cuts and two crosscut adits. The claims were Crown-granted in 1915. The property lay idle for a number of years, work being resumed in 1920. During the year a tunnel was driven about 200 feet under one of the showings and several shallow shafts were sunk. The property was under option in 1923 to Montreal interests, who put in open cuts and a 35 foot long crosscut adit on a showing known as the Canyon vein.

No further work was reported until 1935 when Buena Vista Mining Company, Limited, owned by Cominco Ltd. (60%) and Big Missouri Mines Corporation (40%) optioned the property and began a program of diamond drilling. Ten holes totalling 1,958 feet were put down on the southern zone, representing a silicified zone about 5 acres in extent, and 2 holes totalling 435 feet were drilled on another outcrop about 1,500 feet to the north. Under the agreement, development of the property could be carried on from the Big Missouri workings and to that end the 306 foot drift north from the Big Missouri adit was advanced 217 feet in 1937, however, the plan of development was apparently not followed through.

The Martha Ellen, Glacier, and Leckie Fraction claims, along with the Province and Big Missouri claims (104 B/1, Au 2), were transferred by Thomas S. MacKay to Silver Butte Mines Ltd. in June 1972. Giant Mascot Mines Limited optioned the property late in 1973. A programme of diamond drilling carried out during the summer of 1974 may have been confined to the Big Missouri property. The option was subsequently abandoned.

Silver Butte Mines Ltd. underwent a change of name in 1972 to Consolidated Silver Butte Mines Ltd. In 1975 the company optioned an 80% interest in the Martha Ellen, Glacier, and

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)
 HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

Leckie Fr. claims to Northern Homestake Mines Ltd; the option was subsequently abandoned.

Tournigan Mining Explorations Limited acquired the Martha Ellen and Big Missouri mine properties from Consolidated Silver Butte in about 1978. Westmin Resources Limited optioned a 70% interest in the property in 1979. A geochemical survey, trenching and sampling were carried out in 1980, and diamond drilling in 10 holes in 1982. Open pit reserves in the Martha Ellen zone were estimated at 620,000 tons at 0.111 oz/t Au (Northern Miner, 12/05/83).

For subsequent History see: Big Missouri 104 B/1, Au 2.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

- Map 307 A, Portland Canal Area, B.C., (Geol.), Sc. 1":4 miles - accomp. Memoir 175.
- Geological Map of the Stewart Area, Sc. 1": $\frac{1}{2}$ mile, Fig. 3, Sheet B - accomp. Bulletin No. 58.
- Stewart Area, Crown-Grant claim map, Fig. 15 C - accomp. Bulletin No. 58.
- Westmin Resources Big Missouri-Silbak Premier properties, Western Miner, May 1983, p. 27.
- #Map 104 B/1, Leduc Glacier, (Topo.), Sc. 1:50,000.
- Sketch map of the general geology, Fig. 78, Geological Fieldwork, 1980, p. 204.

REMARKS/REMARQUES

REFERENCES/BIBLIOGRAPHIE

- Schofield, S.J. & Hanson, G.; Geology and Ore Deposits of Salmon River District, British Columbia; Memoir 132, pp. 46-47, Geol. Surv. of Canada, 1922.
- Hanson, George; Portland Canal Area, British Columbia; Memoir 175, p. 158, Geol. Surv. of Canada, 1935.
- Annual Reports, Department of Mines, British Columbia: 1910, p. 65; 1914, p. 154; 1919, p. 79; 1920 p. 61; 1923, p. 83; 1935, p. G 48; 1936, p. B 58; 1937, p. B 41; 1938, p. B 24.
- Mineral Policy Sector; Corporation Files: "Buena Vista Mining Company Ltd."; "Cominco Ltd." - Annual Reports 1936 and 1937; "Northern Homestake Mines Ltd."; "Consolidated Silver Butte Mines Ltd."; "Tournigan Mining Explorations Limited"; "Westmin Resources Limited".
- McConnell, R.G.; Portland Canal District; Summary Report 1910, p. 88, Geol. Surv. of Canada.
- Grove, Edward W.; Geology and Mineral Deposits of the Stewart Area, Northwestern British Columbia; Bulletin No. 58, pp. 126, 132, British Columbia Department of Mines, 1971.
- Geology, Exploration, and Mining; British Columbia Department of Mines: 1973, p. 497; 1972, p. 513.
- Mitchell, M.A.; Big Missouri Group; - in Northern Homestake Mines Ltd., Statement of Material Facts, July 1975.
- Soregaroli, A. and Meade, H.; Promise of the Stewart area, British Columbia; Western Miner, May 1983, pp. 26-29.
- Geological Fieldwork; British Columbia Dept. of Mines: 1980, p. 201.

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