

PRODUCT	ZINC	PROVINCE OR TERRITORY	British Columbia	N.T.S. AREA	82 M/1	REF. ZN 1
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NAME OF PROPERTY	MASTODON					
OBJECT LOCATED - #5, Map 12-1964.						
UNCERTAINTY IN METRES	500.	Lat. 51°14'30"	Long. 118°07'10"			
Mining Division	Revelstoke	District				
County	Township or Parish					
Lot	Concession or Range					
Sec	Tp.	R.				

OWNER OR OPERATOR AND ADDRESS						
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**DESCRIPTION OF DEPOSIT**

The mineralization occurs on the western side of a lenticular mass of Lower Cambrian limestone and dolomite of the Badshot Formation which extends northwest from the upper slopes of the east fork of La Forme Creek to Carnes Creek, a distance of about 3 miles, and has a maximum width from east to west of about three-quarters of a mile. These carbonate rocks are in contact on both the east and west with dark-grey and, less commonly, green phyllites of the Lower Cambrian and Later Lardeau Group.

The rocks in the mine are isoclinally folded and strongly sheared. Relatively small isoclinal dragfolds can be seen at many places in most of the workings, and several larger dragfolds can be seen or inferred. Axial planes of the dragfolds strike about north 30 degrees west and dip 30 to 50 degrees to the northeast. The plunge of the axes varies widely from gently northwest and north to northeast down the dip of the foliation planes.

The plunge, shape, and origin of the dragfolds are of concern in exploration because the zinc mineralization is partly controlled by the dragfolds. see Card 2 ....

Associated minerals or products of value - Silver, lead, cadmium, fluorspar,

**HISTORY OF EXPLORATION AND DEVELOPMENT**

The property is located at the 5,500 foot elevation on the ridge between La Forme and Carnes Creeks, 17 miles north of Revelstoke.

The showings were originally staked in about 1897 as the Noble Three group and surface exploration was carried out during several of the following years. No further activity was reported until 1916 when The Mastodon Mining Company, Limited was incorporated to acquire some 15 claims. During 1916-18 about 450 feet of underground work was carried out, including 2 inclined shafts 35 and 135 feet deep with about 90 feet of drifting and crosscutting at the 90 foot (No. 1) level, and a 135 foot crosscut adit. The company charter was surrendered in 1927.

The showings were restaked in 1932 by E. Larsen and E. Earlandson. Their group of about 22 claims was optioned in 1933 to Fawn Mining Company, Limited. Some prospecting and trenching was carried out before the option was given up in 1936. In 1941 the showings were restaked by the former owners, Larsen and Earlandson, and apparently optioned to D.F. Kidd and associates of Vancouver. Work in 1942 included 1,800 feet of diamond drilling in several holes.

During 1946 the property, then owned by D.F. Kidd and associates, was under option to Valley Mining Company. Trenching was carried out in deep overburden northwest of the main shaft. No further activity was reported under the option agreement. (The company name, Valley Mining, was subsequently changed to: The New Jersey Zinc Exploration Company Ltd.)

Golden Manitou Mines, Limited in December 1948 optioned 51 claims from D.F. Kidd and associates. The claims were subsequently Crown-granted. Surface and underground work during 1949 and 1950 included 2,595 feet of drifting and crosscutting, 410 feet of raising and winzing, 726 feet of diamond drilling, trenching, and geological mapping.

Mastodon Zinc Mines Limited was incorporated in 1951 to bring the property into production. The company was 52½% owned by Golden Manitou Mines. The installation of a 150 ton per day mill, a hydro-electric plant on La Forme Creek, a 1,400 foot incline, and a 9,000 foot narrow gauge railway was carried out during 1951-52. The mill was put into operation in August 1952 and continued until November 30th

see Card 2 ....

## HISTORY OF PRODUCTION

From 1926 to 1960, inclusive, a total of 31,940 tons of ore were milled or shipped from this property. From this ore 8 ounces of gold, 6,113 ounces of silver, 180,334 pounds of lead, 5,911,619 pounds of zinc, and 24,716 pounds of cadmium were recovered.

## REFERENCES

Reports of Minister of Mines, British Columbia: 1898, p. 1060; 1899, p. 672; 1900, p. 809; 1916, p. 192; 1917, pp. 150, 181; 1918, pp. 155, 189; 1924, p. 204; 1933, p. 212; 1935, p. G51; 1936, p. E53; 1946, p. 175; 1949, p. 208; 1950, p. 159 ++; 1951, p. 193; 1952, p. 205; 1953, p. 157; 1959, pp. 106-116 +; 1960, p. 86.

Gunning, H.C.; Geology and Mineral Deposits of the Big Bend Area, B.C.; Summary Report 1928, Pt. A, pp. 140-153, 189-190, Geol. Surv. of Canada.

Wheeler, J.O.; Big Bend Map-Area, B.C.; Paper 64-32, p. 29, Geol. Surv. of Canada.

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy; 1951, Investigation No. MD 2759.

Pike, Albert E.; Development of the Mastodon Zinc Mine; Canadian Institute of Mining and Metallurgy, Bulletin, July 1953, pp. 403-410.

Mineral Policy Sector; Corporation Files: "Fawn Mining Company, Limited"; "Golden Manitou Mines, Limited"; "Mastodon-Highland Bell Mines Limited"; "Le Mans Resources Ltd.".

Exploration in British Columbia; British Columbia Dept. of Mines, 1975, p. E56.

## MAP REFERENCES

#Map 12-1964, Big Bend, (Geol.), Sc. 1":4 miles - accomp. Paper 64-32.

Map 273 A, Big Bend Area, (Geol.), Sc. 1":4 miles - accomp. Summary Report, 1928, Pt. A.

Map 4404 G, Mount Revelstoke, (Aeromag.), Sc. 1":1 mile.

\*Map 82 M/1 E, Mount Revelstoke, (Topo.), Sc. 1:50,000.

## REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	12-77	08-87					

PRODUCT

ZINC

PROVINCE OR  
TERRITORY

British Columbia

N.T.S. AREA 82 M/1

- Card 2 -  
REF. ZN 1

NAME OF PROPERTY

MASTODON

## DESCRIPTION OF DEPOSIT (continued)

Several shear zones referred to as strike faults are recognized, and probably many more are present which have not been recognized. They strike northwest and dip at moderate angles to the northeast parallel to the foliation.

The orebodies are replacements of limestone, dolomite, and phyllite mainly by sphalerite. Fine-grained galena is present in minor amounts, and grey copper is found locally. Unreplaced remnants of the host rocks constitute the gangue. The mineralized zones that have been explored and mined are in or close to the strike faults. Some are in the fault zones; others are in folds or in banding related to cleavage, both of which are cut by the faults. The orebodies dip to the northeast and rake to the north. They are tabular or lenticular and commonly split or branch. The largest orebody occurs along a shear zone on the contact between phyllite on the southwest and limestone on the northeast. It is a slightly curved tabular to lenticular orebody with a strike length of 200 to 300 feet, and a width parallel to the dip of 150 to 200 feet. The orebody strikes about north 30 degrees west and dips 50 to 55 degrees to the northeast. The footwall is well defined, and the hangingwall is gradational. The orebody has a fairly uniform thickness of 5 to 10 feet and pinches out rapidly toward the extremities.

Fluorite and barite occur in the "north showings", some 3,500' northerly from the "main showings", but were not observed in the main deposit.

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

of that same year when milling ceased. Work at the mine continued until the end of October 1953 during which time a low level adit, the 5,000 level, was driven over 1,000 feet with 1,450 feet of drift to the south and southeast.

Highland-Bell, Limited in 1960 acquired Golden Manitou Mines interest in Mastodon Zinc Mines Limited. The mine was reopened and the mill operated from June until October 16th, 1960. The mine closed permanently in November of that year. The company name (Mastodon) was changed in December 1960 to Mastodon-Highland Bell Mines Limited.

Some of the Crown-grants to the east of the mine workings reverted to the Crown in 1974. Four claims, the Eric Nos. 2, 4, 8, and A & E #6 Fr. (Lots 15617-15619, 15634) were acquired by Cobra Resources Ltd. in Nov. 1974. The company name was changed in June 1975 to Le Mans Resources Ltd. Work in 1975 included reconnaissance prospecting and geochemical sampling on Eric 2, 4, 8.