

NAME OF PROPERTY MASTADON (MASTODON)

OBJECT LOCATED - Mastodon claim - Lot 2384.

UNCERTAINTY IN METRES-300. Lat. 49°00'30" Long. 118°10'20"

Mining Division Greenwood District Similkameen

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

Chromex Nickel Mines Ltd.

DESCRIPTION OF DEPOSIT

Map 6-1957 indicates the underlying rocks are Jurassic andesite, latite, agglomerate and flow breccia of the Rossland Group. On the south slope of Castle Mountain these rocks are cut by serpentized ultrabasic bodies which are in turn cut by granitic rocks of the Nelson intrusions. The serpentized zone reportedly follows the intrusive contact, forming a zone 1½ to 2 miles long and about ¾ of a mile wide, striking roughly north-south and dipping easterly. Chromite occurs in pods and disseminations in the serpentized dunite intrusive. Diamond drilling disclosed a large body of serpentized dunite containing nickel. Drill core samples tested at the Mines Branch, Ottawa, indicate an appreciable part of this nickel is present in the form of a nickel-bearing serpentine, and thus, not recoverable by conventional methods. The remaining nickel occurred as nickeliferous magnetite, as fine grained millerite and pentlandite, and as nickel-bearing pyrite. Some copper values were obtained in the 1973 drilling.

Associated minerals or products of value - Chromium.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at approximately 3,000 feet elevation on the southwesterly slope of Castle Mountain 3 miles southeast of Christina Lake and 12 miles east of Grand Forks.

Details of early staking and prospecting on this ground are lacking. The Brandon (Lot 2382), Little Burne (Lot 2383) and Little Burne Fr. (Lot 2387) claims were Crown-granted in 1901 to J. McNulty and associates. The Marshall, Little Annie, Little Brown (Lots 2388-2390), and Marshall Fr. (Lot 2404) were Crown-granted to the above in 1904. The Sylvester K. (Lot 2385) claim was Crown-granted to Adolph Sercu in 1900. The Sylvester K. Fr. (Lot 2386 G 1) was Crown-granted to Mr. Sercu in 1915.

The Mastodon group, comprising the Mastodon, Mammoth, Black Tail Fr., Pan, Dominion, and Canyon claims, was leased in 1917 for a period of 1½ years from Angus Cameron and associates of Laurier, Washington, by the Stewart-Calvert Company, of Oroville, Washington. Chromite was reportedly discovered on the property in 1917 and shipments were made from open cuts and 2 adits, the upper about 200 feet long, on the Mastodon claim, and from a 30 foot deep inclined shaft on the Mammoth claim. The Mastodon, Mammoth, Dominion, Pan, Mastodon Fr., and Canyon (Lots 23845-23885, 23905, respectively) were Crown-granted to W.H. Stewart in 1919. Open cutting was done on several claims to the northeast, including the Midnight and Black Tail. The Midnight claim was owned by W.H. Phillips of Cascade in the 1930's.

Northern Syndicate Limited, of Calgary, in 1939 acquired a lease on the Crown-grants from W.H. Stewart of Bellevue, Washington, and Wm. Calvert, Jr., of Seattle. An additional 14 claims were acquired, 7 by purchase on a royalty basis from R.E. Wolveston of Greenwood and D.P. Simpson of Osoyoos, and 7 by staking. These claims are the Black Tail, Power, Midnight, Big Cave, Chromite, Serpentinite, Serpentinite No. 1, Power 1-5, 10, 12. Of these the first four claims (Lots 35675, 35695-35715) were subsequently Crown-granted. No activity other than prospecting and sampling was reported at that time. Canadian Exploration, Limited staked 13 claims in this vicinity in 1941.

see Card 2 ....

## HISTORY OF PRODUCTION

In 1918, 670 tons of ore were shipped from this property. This ore averaged 38.5% chromite.

## MAP REFERENCES

Map 6-1957, Kettle River, (Geol.), Sc. 1":4 miles.  
Mineral Reference Map No. 6, Grand Forks, Greenwood & Trail Creek, (Surveyed Claims), Sc. 1":1 mile, B.C. Dept. of Lands, 1932.  
#Map 82 E/1, Grand Forks, (Topo.), Sc. 1:50,000.  
Plan of Mineral Claims on Castle Mountain, Sc. 1":500 ft. - in Northern Syndicate Limited file.

## REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	2-77	12-86					

## REFERENCES

- Reports of Minister of Mines, British Columbia:  
1900, p. 993; 1901, p. 1229; 1904, p. 300; 1915, p. 450; 1917, pp. 199, 200; 1918, pp. 25, 204 +; 1919, p. 370; 1922, p. 170; 1931, p. 121; 1967, p. 234; 1968, p. 236.
- O'Neill, J.J. & Gunning, H.C.; Platinum and Allied Metal Deposits of Canada; Economic Geology Series No. 13, p. 106, Geol. Surv. of Canada, 1934.
- Mineral Policy Sector; Corporation Files: "Northern Syndicate Limited"; "Chromex Nickel Mines Ltd."
- Investigation Report 69-75, Mineralogical Examination of a Low-Grade Nickel Ore from the Cascade Area, B.C.; Mines Branch, Ottawa, September 1969.
- Investigation Report 70-38, Mineral Recovery From a Drill Core Sample Submitted by Chromex Nickel Mines Ltd., Vancouver, British Columbia; Mines Branch, Ottawa, May 1970.
- Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 311; 1970, p. 433; 1971, p. 373; 1972, p. 34; 1973, p. 35; 1977, p. 12; 1978, p. 13.
- Munitions Resources Commission, Canada, Final Report, 1920, p. 166.
- Eardley-Wilmot, V.L.; Chromite Notes, Field Trip, August, 1939 - in Commodity File MR-CR-301.00, Mineral Policy Sector.

PRODUCT NICKEL	PROVINCE OR TERRITORY British Columbia	N.T.S. AREA 82 E/1	- Card 2 - REF. NI 1
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HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Chromex Nickel Mines Ltd., incorporated January 1966, acquired the Mastodon group of Crown-grants. Hunter Point Explorations Ltd., a wholly owned subsidiary also incorporated in January 1966, staked over 100 adjacent claims in the Ann and other groups. Geophysical surveys carried out during the year included a combined airborne magnetometer, electromagnetic, and scintillometer survey, and a ground magnetometer survey. Drilling during 1967-1968 totalled 8,300 feet in 18 holes, mainly on the Mastodon claim. In 1969 an additional 1,000 feet of diamond drilling was carried out, again mainly on the Mastodon claim. Additional claims were staked, 74 to the east and 16 to the west. Drilling in 1970 totalled 5,100 feet in 12 holes. In 1971 most of the work was concentrated on the Basic property (82 E/1, Ni 2) although some drilling was done on the Ann and Haz-al groups and the Canyon claim. Diamond drilling in 1972-1973 totalled about 1,600 feet in 5 holes, in part on the Ann and H groups.

Open pit indicated reserves were reported in 1974 at 391,000,000 tons averaging 0.24% nickel (Ref. Chromex Nickel Mines Ltd. - Statement of Material Facts, July 1974).

Work by Chromex Nickel in 1977-78 included trenching and 411.5 m of diamond drilling in 2 AQ holes.