

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

LODESTONE & OLIVINE MOUNTAINS

OBJECT LOCATED - **Lodestone Mountain.**
OBJET LOCALISÉ

UNCERTAINTY FACTEUR D'INCERTITUDE	Lat. 49°28'	Long. 120°50'
	Lat.	Long.
Mining Division Division minière	Similkameen	District District
County Comté		Township or Parish Canton ou paroisse
Lot Lot		Concession or Range Concession ou rang
Sec Sect.	Tp. Ct.	R. R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

Imperial Metals Corporation

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The formation consists of the Nicola group of pyroclastics and lavas intercalated locally with limestone or argillite. These are intruded by a stock which extends a distance of 11 miles from Grasshopper mountain to Arrastra creek and varies in width from 2 to 4 miles. The ultrabasic stock varies in composition from peridotite to gabbro with the most abundant type being a coarse-grained pyroxenite. This grades into a peridotite composed largely of olivine. In places the peridotite carries chromite either as individual grains or as minute veinlets. Native platinum is also present, but in small quantity, and can rarely be seen although it is evidently concentrated near stringers of chromite.

Magnetite occurs in the pyroxenite which occupies a belt from 1 to 2 miles wide extending from Olivine mountain southward for 8 miles to Lodestone mountain. Most of the mineralization occurs on Lodestone mountain and Tanglewood hill. The magnetite occurs in two general ways, as individual grains disseminated through the rock and as lenses or vein-like bodies which consist largely of magnetite though

p.t.o.

Associated minerals or products - Vanadium, titanium.
Minéraux ou produits associés

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

Lodestone Mountain lies about 15 miles due west of Princeton. Olivine mountain lies about 3½ miles north-northwest, and Tanglewood Hill a mile north-northeast of Lodestone Mountain.

The magnetite occurrence has been known since prior to 1906 and over the years has been staked many times and a considerable amount of trenching carried out. During 1954-55 the United States Steel Corporation carried out a reconnaissance dip-needle survey and sampled the area. Royal Canadian Ventures Ltd. apparently held 40 claims in the area in about 1956. The B group of 17 claims, extending from the summit of Tanglewood Hill south to Blakeburn Creek, were located in 1957 by E. and R.J. Mullin; a magnetometer survey, trenching and sampling was reported at that time.

Imperial Metals and Power Ltd., incorporated in 1959, acquired about 100 claims in the area, including the B, DB, EV, A-G, and Iron groups. On the B group 10 churn drill holes were put down to depths ranging from 50 to 150 feet, with the average less than 100 feet. In 1962 a bulk sampling program was carried out on a section of Lodestone Mountain and 11 diamond drill holes, the deepest 330 feet, were drilled. A study was begun in 1963 to determine the feasibility of producing pig iron as the company holds coal and limestone deposits in the same general area. In 1965, 45 tons of magnetite ore and 10 tons of Coalmont coal were shipped to the Lurgi Corporation in Frankfurt, Germany, for testing; the results indicate that pre-reduced pellets of up to 90% iron can be produced. Percussion drilling in 44 holes totalling 8,400 feet was carried out during 1966. On the basis of this work, proven reserves are estimated at 98,654,000 tons averaging 15.54% iron and 3 pounds vanadium pentoxide per ton, suitable for pelletizing and vanadium recovery (Canadian Mines Handbook 1976-77, p. 158).

Dominion Foundries and Steel, Limited, by an agreement ratified in January 1972, acquired the right to explore and develop the property. During 1973-74 The Cleveland-Cliffs Iron Company was engaged to carry out diamond drilling, 12,000 feet of percussion drilling, feasibility and marketing studies. Proven and probable reserves within the limits of the proposed open pit were reported at 91,171,000 short tons 17.3% iron (Financial Post Survey of Mines, 1978, p. 186). Dominion

p.t.o.

1960 - magnetic survey

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

Foundries gave up the option at the end of 1976. For the above work the company earned a 13.46% interest in Imperial Metals and Power Ltd.

Invex Resources Ltd., incorporated February 1978, acquired 51% of the shares of Imperial Metals and Power by March 1981. These companies, along with Risby Tungsten Mines Ltd., amalgamated in December 1981 under the name Imperial Metals Corporation. In 1983 Imperial amalgamated with E and B Canada Resources Ltd. under the name Imperial Metals Corporation. In 1984 Imperial carried out a geochemical rock survey (122 samples).

Tiffany Resources Inc optioned the property in 1987.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 888 A, Princeton, (Geol.), Sc. 1":4 miles - accomp. Memoir 243.

Map 749 G, (Aeromag.), Sc. 1":4 miles.

*Map 92 H/7, Princeton, (Topo.), Sc. 1:50,000.

Map 92 A/10, Tulameen, (Topo.), Sc. 1:50,000.

Lodestone Mountain Stock, Sc. 1":1½ miles, Fig. 5, Report of Minister of Mines, British Columbia, 1959, p. 41.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

containing some mica and pyroxene. Assays on the iron-bearing material indicate a titanium content of about one per cent. The mineralization includes magnetite, ilmenite, hematite, and geothite.

Comp./Rev. By Comp./rév. par			DMacR	DMacR			
Date Date	02-73	09-78	05-83	02-87			

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Mineral Policy Sector; Corporation File: "Imperial Metals and Power Ltd."

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Reports of Minister of Mines, British Columbia: 1956, p. 136; 1963, p. 59; 1965, p. 166; 1966, p. 175; 1968, p. 205.

Exploration in British Columbia; BCDM: 1984, p. 186.

George Cross News Letter: 1987, No. 25.