

NAME OF PROPERTY  
NOM DE LA PROPRIÉTÉ

AJAX, WHEAL TAMAR, MONTE CARLO

OBJECT LOCATED - Shaft on Wheal Tamar claim.  
OBJET LOCALISÉ

UNCERTAINTY 200 m FACTEUR D'INCERTITUDE	Lat. 50°36'40"	Long. 120°23'15"
Lat.	Lat.	Long.
Mining Division Kamloops Division minière	District District	Kamloops
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**

Cominco Ltd.

**DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT**

The property is underlain in part by the Iron Mask batholith (Coast intrusions) of Jurassic and (?) Later age. Along the southern edge of the property these rocks are locally intrusive into Upper Triassic Nicola Group volcanics. Intrusive rocks on the property are principally of the two following types: coarse grained diorite, pyroxenic diorite, pyroxenite; and fine grained albitized microdiorite. The microdiorite was recognized in 1960 as a new suite of intrusive rocks and was assigned the name Sugarloaf Intrusions. The age of the Sugarloaf intrusions is post-Iron Mask and post-picrite basalt intrusions. The picrite basalts, occurring locally at the southern edge of the property, are intrusions within the batholith but are not batholithic. Evidence of faulting is widespread; those with a northwesterly strike and steep dip are pre-mineralization and considered important. Copper mineralization on the property is found principally in the Sugarloaf rocks, and less frequently in the diorite and pyroxenite. At the Ajax showings quartz veinlets, and epidote veinlets and disseminations, are common. Mineralized calcite or calcite-quartz breccias occur locally and are

Associated minerals or products  
Minéraux ou produits associés

see Card 2 ....

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

This property extends easterly from Jacko Lake, about 5 miles southwest of Kamloops. The Ajax claim (Lot 4710) is located about 1/2 mile east of the lake; the Wheal Tamar claim (Lot 2126) is located 3,500 feet east-northeast of the Ajax; the Monte Carlo (Lot 4176) is about 1,500 feet east of the Wheal Tamar.

The first report of underground exploration work on the Wheal Tamar claim was in 1898. The claim was at that time owned by O.S. Batchelor and the Boillot Bros. By 1904, three groups of claims had been located. These were the Wheal Tamar, Tamar Fraction, Blizzard Fraction; the Monte Carlo, Sultan, Anaconda, Whitecap Fraction; the Ajax, Hercules, Jupiter, Neptune, Mars. The first development work reported on the Monte Carlo was in 1905, and on the Ajax in 1906. The Kamloops Queen, located adjacent to the Wheal Tamar claim in 1908, subsequently lapsed. The Wheal Tamar and Forlorn (Lot 3016) claims were Crown-granted to O.S. Batchelor in 1912 and 1916 respectively. The Granby Consolidated Mining, Smelting and Power Company, Limited optioned the Wheal Tamar group in 1916 and carried out diamond drilling, but the results of this work are not recorded. Ownership of the Monte Carlo and Ajax groups was not recorded, other than that G.J. Rogers, of Knutsford, owned the Monte Carlo in 1913 and acquired the Ajax prior to 1923.

Exploration work was carried out on an annual basis to 1914, and sporadically thereafter. The original workings on the Wheal Tamar include 6 shafts and an adit; in 1909 the adit was 470 feet long and shafts and adit totalled over 700 feet. The Monte Carlo workings included an adit, and a shaft said in 1924 to be 60 feet deep. The Ajax was explored by two adits.

The Consolidated Mining and Smelting Company of Canada (Limited) (Cominco Ltd. since 1966) optioned 13 claims in the Ajax and Monte Carlo groups from Mr. Rogers late in 1928. Diamond drilling during 1929 was done in 10 holes on the Ajax group. The results indicated sparse mineralization in a zone approximately 250 feet wide and trending N65°W with steep dip to the north. On the Monte Carlo 90 feet of drift was driven, and 800 feet of diamond drilling was done in 3 holes.

see Card 2 ....

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+Carr, J.M.; Deposits Associated with the Eastern Part of the Iron Mask Batholith; Report of Minister of Mines, British Columbia, 1956, pp. 47-54, 63-67.

++Preto, V.A.G.; Geology of the Eastern Part of Iron Mask Batholith; Report of Minister of Mines, 1967, pp. 137, 138, 142.

Reports of Minister of Mines, British Columbia: 1899, p. 731; 1901, p. 1078; 1904, pp. 230, 231; 1906, p. 174; 1908, p. 121; 1913, pp. 190, 191; 1916, p. 266; 1923, p. 150; 1924, p. 146; 1928, p. 209; 1929, p. 226; 1957, p. 30; 1961, p. 48.

Cockfield, W.E.; Geology and Mineral Deposits of Nicola Map-Area, British Columbia; Memoir 249, p. 113, Geol. Surv. of Canada, 1948.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1973, p. 197.

Geological Fieldwork, British Columbia Dept. of Mines: 1976, p. 40.

Exploration in British Columbia; British Columbia Dept. of Mines: 1980, p. 235; 1987

George Cross News Letters; 1986, No. 226; 1987, No. 234; 1988, No. 212; 1989, No. 29.

Mineral Policy Sector; Corporation Files: "Imperial Metals Corporation"; "Teck Corporation"; "Metall Mining Corporation"

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

\*Map 92 I/9, Kamloops, (TOPO.), Sc. 1:50,000.

Map 886 A, Nicola, (Geol.), Sc. 1":4 miles - accomp. Memoir 249.

Fig. 13, Eastern Part, Iron Mask Batholith, (Geol.), Sc. 1":1 miles - Report of Minister of Mines, British Columbia, 1967.

#Fig. 3, Eastern Part of the Iron Mask Batholith, Sc. 1":3,000 ft., Report of Minister of Mines, British Columbia, 1956.

Fig. 7, Ajax Mineral Claim, Sc. 1":300 ft., Report of Minister of Mines, British Columbia, 1956, p. 65.

Map 5216 G, Kamloops, (Aeromag.), Sc. 1":1 mile. (1968).

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par			DMacR	DMacR	DMacR		
Date Date	12-71	08-78	05-86	04-87	05-89		

PRODUCT COPPER  
PRODUIT

PROVINCE OR PROVINCE OU British Columbia  
TERRITORY TERRITOIRE

N.T.S. AREA 92 I/9  
RÉGION DU S.N.R.C.

REF. CU 4  
RÉF.

NAME OF PROPERTY AJAX, WHEAL TAMAR, MONTE CARLO  
NOM DE LA PROPRIÉTÉ

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

DESCRIPTION OF DEPOSIT / DESCRIPTION DU GISEMENT (continued)

commonly vuggy. The magnetite content is relatively high in chloritic sheared sections. Chalcopyrite occurs as stringers as much as  $\frac{1}{2}$  inch wide, or as blebs, and as fine disseminations. Pyrite may accompany the disseminated chalcopyrite or may occur separately. At the Wheal Tamar showings chalcopyrite occurs in fissures in partly albitized porphyritic microdiorite at the contact with diorite.

Berens River Mines Limited in 1952 held an option on several of these claims. Diamond drilling was done in 4 holes midway between the Wheal Ramar and Monte Carlo claims. No mineralization was encountered and the option was dropped.

Cominco Ltd. resumed work on the property in 1954. The company at that time held 4 Crown-grants under lease and 16 full and fractional claims. A number of claims were subsequently acquired until in 1967 the property comprised the Jacko group of recorded claims and 8 Crown-grants including, in addition to those mentioned above, the Copper Star (Lot 3015), Grass Roots (Lot 1496), Sultan (Lot 4717), and Neptune (Lot 4712). An electromagnetic survey was carried out in 1954 and further geophysical work was reported in 1958, and in 1967 (magnetometer survey). Diamond drilling by Cominco to the end of 1967 totalled over 25,000 feet in 56 holes. Most of this drilling has been concentrated on the Ajax showings. Drilling was reported in 1967 on the Wheal Tamar and Monte Carlo showings. Drilling to 1967 is reported to have developed 10 million tons 0.5% copper (Prendergast, J.B., Summary Report on Property of Pinnacle Mines Ltd., Jan. 30, 1969).

No further activity was reported until 1973 when exploration work carried out by Attan Mines Ltd. included an induced potential survey over 9.4 line miles, and percussion drilling in 28 holes totalling 7,210 feet on the Ajax, 23 holes totalling 6,900 feet on the Wheal Tamar, and 4 holes totalling 1,200 feet on Jacko 10 Fr.

In 1980 Cominco Ltd carried out magnetometer and induced potential surveys over 66 km and 14 347 m of percussion drilling in 190 holes; E&B Canada Resources Ltd. provided \$1,000,000 in financing for this project, thereby earning a 6% interest in the property; E&B was subsequently acquired by Imperial Metals Corporation. Drill indicated reserves were reported at 105,000,000 tons grading 0.32% Cu, 0.008 oz/t Au (Joint Management Information Circular, Royex Sturgex Mining Limited and Cullaton Lake Gold Mines Ltd. April 27, 1984).

Teck Corporation and Metall Mining Corporation, through Afton Operating Corporation, in November 1986 obtained an

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## HISTORY OF EXPLORATION AND DEVELOPMENT (con't)

option to earn a 70% interest from owners Cominco Ltd and Imperial Metals Corporation. Work by Teck in 1987 included 11,582 m of diamond drilling in 77 holes. Reserves were reported as 105,000,000 tons at 0.51% Cu equivalent (Imperial Metals, 1987 Annual Report) or 27,200,000 tons at 0.46% Cu, 0.01 oz/t Au (Imperial Metals, 1988 Annual Report). Work in 1988 included development of the East and West open pits, and construction of a haul road to transport the ore to the Afton mill, some 10 km to the northwest.