

NAME OF PROPERTY HIDDEN CREEK (ANYOX)

OBJECT LOCATED No. 2 Zone workings, Revenge (L 482) & Manson (L 485) claims.

UNCERTAINTY IN METRES 300. Lat. 55°26'33" Long. 129°49'35"

Mining Division Skeena District

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

Cominco Ltd.

DESCRIPTION OF DEPOSIT

Jurassic Hazelton group volcanic and sedimentary rocks which underlie most of the Granby Bay area form a large inclusion in the granitic matrix of the Coast Range complex. The surrounding granitic rocks are generally coarse-grained granodiorites which grade variably between hornblende quartz diorite and leucocratic quartz monzonite. The volcanic rocks in the Granby Bay inclusion consists largely of altered, pillowed, and massive andesites, some banded crystal tuffs, and massive basic sills. The volcanics have been intruded by small gabbroic plugs and various dykes. The overlying sediments include thinly striped argillites, colour-banded dark siltstones, dark sandstones, and minor limestone as lenses. The main contact is usually sharply defined, and is apparently conformable, although complicated by involved concentric folding.

The Hidden Creek ore-bodies are at or near the contact between a body of amphibolite on the west and argillites on the east. In the vicinity of the mine the contact curves in the form of the letter S. North and south of the curve the contact see Card 2

Associated minerals or products - Gold, silver, pyrite.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the west side of Observatory Inlet some 80 miles north of Prince Rupert. The town of Anyox, located in Granby Bay, was the location of Granby Mining Company's smelter, flotation mill, coke ovens, and hydro development during the period 1910-1935. The flotation mill and smelter treated ore from three mines, the Hidden Creek, Bonanza, and Outsider. Gold-bearing siliceous ore from the nearby Granby Point and Golskeish mines was used as a flux in the smelting operation.

The Hidden Creek property is located about 1½ miles north of the north end of Granby Bay, between elevations of about 500 to 900 feet. John Flewin, Government Agent at Port Simpson and discoverer of the nearby Bonanza property (103 P/5, CU 5), organized a mining partnership with George Rudge of Port Simpson to prospect the area. A prospecting party comprised of John Flewin's son, W.R. Flewin, a prospector named McMillan, and George Rudge discovered the Hidden Creek showings and eight claims, the Gamma, Rudge, Revenge, Donald, McKinley, Manson, Alpha, and Kenneth (Lots 480-486, 488 respectively) were staked on August 1, 1901.

M.K. Rodgers of Seattle, agent for the Marcus Daly interests of Butte who were operating the nearby Bonanza mine, on May 14, 1902 secured an 18 month working bond on the Hidden Creek property. Considerable development work was done in 4 adits on the "Camp Bluff" showing during the year but the Daly interests subsequently gave up the bond.

The property was bonded to the Hidden Creek Mining Company, of Seattle, on June 1, 1905. The Hidden Creek Copper Company, Limited was incorporated in British Columbia in February 1907. Some \$50,000 was expended in development work but activity ceased in 1908 due to lack of funds and the property reverted to the original owners. M.K. Rodgers was again offered the property and the purchase was made by Thomas Hodgins, a Butte banker and mining man, and himself, in 1908 or 1909. Development work in several adits continued into 1910.

The Granby Consolidated Mining, Smelting and Power Company, Limited purchased the property in 1910. Development work began on a large scale and the construction of a smelter began in 1912. Mining began in 1914 and the 2,000 see Card 2

HISTORY OF PRODUCTION

From 1914-1936, 23,948,419 tons of ore were mined at this property. From this ore 121,299 ounces of gold, 6,638,088 ounces of silver, and 708,891,739 pounds of copper were recovered.

REFERENCES

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 1901, p. 994; 1902, pp. 45, 50; 1903, p. 53;
 1904, p. 101; 1905, p. 80; 1907, pp. 74, 216;
 1908, p. 58; 1909, p. 68; 1911, pp. 65, 67;
 1912, pp. 99, 173; 1913, pp. 77, 84; 1914, pp. 143-
 147; 1915, pp. 184, 186; 1916, pp. 52, 247-252,
 433; 1917, pp. 46-64 + ; 1918, p. 54; 1919, pp. 44-
 48; 1920, p. 46; 1921, p. 46; 1922, p. 50; 1923,
 pp. 50-52; 1924, p. 50; 1925, p. 73; 1926, p. 76;
 1927, pp. 67, 396; 1928, p. 77; 1929, p. 79; 1930,
 pp. 80-82 + ; 385; 1931, p. 36; 1932, p. 52; 1933,
 pp. 45, 301; 1934, p. B-11 + ; 1935, pp. B-29, G-47;
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 p. 68; 1950, p. 80; 1951, p. 107; 1952, p. 78;
 1954, p. 85; 1955, p. 21; 1956, p. 21; 1957, p. 8;
 1961, p. 10; 1963, p. 13; 1965, pp. 57-59 + ; 1967,
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 175, pp. 93-99, Geol. Surv. of Canada, 1935.

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 Canadian Ore Deposits, Canadian Institute of Mining &
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 29, 1924, p. 200.

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Engineering & Mining Journal: Sept. 8, 1906, pp. 441-444;
 Jan. 3, 1914, Vol. 97; Dec. 22, 1923, p. 1067.

MAP REFERENCES

Map 307 A, Portland Canal Area, Cassiar District, (Geol.),
 Sc. 1":4 miles - accomp. Mem. 175.

Geology of the Anyox Area, Sc. 1":2 miles, Fig. 8, Report of
 Minister of Mines, British Columbia, 1965, p. 58.

#Composite Map of Hidden Creek, claims & orebodies 1-5,
 Sc. 1":1,200', Fig. 1, Report of Minister of Mines,
 British Columbia, 1917, p. 49.

*Map 103 P/5, Observatory Inlet, (Topo.), Sc. 1:50,000.
 Geology of the eastern Anyox pendant, Sc. 1 cm:0.9 km,
 Fig. 29-1, Geological Fieldwork, 1985, p. 212.

REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	2-79	08-86					

NAME OF PROPERTY

HIDDEN CREEK (ANYOX)

DESCRIPTION OF DEPOSIT (continued)

strikes north. The distance between the two ends of the curving part is more than 1 mile and the ore-bodies are situated on the eastern part of the southern half of the S-like curve. Underground work has shown that in the northern part of the mineralized area the argillite-amphibolite contact from the surface to a depth of, in places, 500 feet dips east at a moderate angle, but below swings to a steep westerly dip which holds to a depth of at least 2,500 feet. In the southern part of the mineralized area the contact dips steeply west except in some places where, at the surface, the dip is at a high angle eastward but changes below ground to a steep westward dip.

Eight ore-bodies are known, six of which have been mined. Parts of ore-bodies Nos. 1 and 2 were visible at the surface; Nos. 3, 6, and 7 were drift covered; and Nos. 4, 5, and 8 did not reach the rock surface.

Ore-bodies Nos. 1, 4, and 5 form a fairly continuous body some 2,000 feet long on the eastern and southeastern contact of the southern half of the S-like structure. Ore-body No. 7 is a short distance north. Ore-bodies Nos. 2 and 3 lie in a shear zone within the amphibolite 100 to 300 feet west of the contact. Ore-body No. 6 is at the south end of the S-like structure, about 1,000 feet southwest of No. 1 body. Body No. 8 lies between Nos. 1 and 6. The ore-bodies vary considerably in size. No. 1 is the largest and on some levels is as much as 1,500 feet long and 250 feet wide. It has a dip length of 1,200 feet. No. 6 ore-body is only a few hundred feet long and up to 70 feet wide.

Ore consists of solid sulphide, of amphibolite ribboned with sulphide, of highly silicified rock with sulphides, and of all gradations between solid sulphide and amphibolite ribboned with sulphide and between solid sulphide and siliceous ore. The sulphides are chalcopyrite, pyrrhotite, pyrite, magnetite, arsenopyrite, and sphalerite. The gangue consists of amphibolite, or silicified argillite, or amphibolite and small amounts of actinolite, quartz, calcite, epidote, and biotite.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

ton per day smelter was put into operation in March of that year. A 100 ton per day experimental concentrator was put into operation in 1918. A new 1,500 ton per day concentrator was put into operation in 1924. Its capacity was increased to 3,200 tons by 1927 and to 5,000 tons per day by 1932. From 1930 all the ore was milled and the concentrate smelted. The mine was developed by 5 levels from surface, the main haulage being through the 385 and 150 foot levels. A 4-compartment shaft was sunk to the minus 960 foot level and extensive development carried out. The mill ceased operations on July 31, 1935. All equipment was removed and the town permanently closed in September of that year.

Reserves at closing in 1935 were reported at 1,806,332 tons at 1.28% copper. Of the above amount 602,200 tons was in pillars and 1,124,102 tons at 1.29% copper, 0.0031 oz gold and 0.24 ounce silver per ton were available for mining (Granby Mng, 1935 AR).

The Consolidated Mining and Smelting Company of Canada Limited purchased the property from Granby in 1937. Work during 1937-38 included 18,201 feet of diamond drilling and 2,072 feet of drifting on several levels.

No further activity was reported until Ventures Limited obtained a lease and option in the fall of 1941. A subsidiary company, Anyox Metals Limited, was incorporated in March 1942 to take over the lease and option. Some diamond drilling was reported before the company withdrew from the option.

During 1950-52 Consolidated carried out geological and geophysical surveys and 2,352 feet of diamond drilling in 4 holes. In 1954 an electromagnetic survey was carried out near the old workings and in some adjacent geological contact areas. Further geological and geophysical surveys were carried out in 1955. Diamond drilling in 1956 totalled 11,740 feet in 12 holes to explore an area south and west of the old workings. In 1957 diamond drilling was done in 2 holes totalling 2,911 feet on the Spruce claim (Lot 767) about one mile south of the old workings. Two deep holes totalling 4,913 feet were put down from surface in 1961. On the Kenneth claim (Lot 488), northeast of the old workings, one diamond drill hole was put down from surface to a depth of 2,898 feet in 1963.

continued reverse Card 2

REFERENCES (continued)

- Mineral Policy Sector; Corporation Files: "Granby Consolidated Mining, Smelting and Power Company, Limited"; "Ventures Limited"; "Anyox Metals Limited"; "Cominco Ltd."; "Colby Mines Ltd.".
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HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

The company name (Consolidated) was changed in 1966 to Cominco Ltd. Geological mapping was reported in 1967. Colby Mines Ltd. in April 1973 acquired by assignment from Tymac Construction Ltd. a licence dated June 6, 1972 from Cominco Ltd. to install and operate a leaching plant in the old Hidden Creek workings to recover copper from the mine and broken ore. In 1973 Colby spent about \$20,000 to obtain a cost estimate. Indicated reserves were reported at over 20 million tons in a contiguous block grading 0.46% copper (NM 31/05/73). This low grade zone includes the old No. 3 orebody which had a remaining reserve of 156,440 tons at 1.30% copper.

Colby abandoned the licence in 1975. Sunshine Valley Minerals, Inc., of Manson, Washington held the slag dump as the Black Sun claim in 1975. A study was made of the potential of the slag for metallic and nonmetallic uses. Cominco carried out a geochemical rock sample survey in 1976.

The property was investigated by Mitsubishi Metal Corp under a joint venture with Cominco Ltd in 1982; work included approximately 3 800 m of diamond drilling.