PROVINCE OR **TERRITOIRE** 

PROVINCE OU British Columbia

N.T.S. AREA 82 F/15 RÉGION DU S.N.R.C.

REF. PB 12 RÉF.

#### NAME OF PROPERTY BLUEBELL NOM DE LA PROPRIÉTÉ **OBJECT LOCATED** OBJET LOCALISÉ 49045140" Long. 116<sup>0</sup>51'30" UNCERTAINTY FACTEUR D'INCERTITUDE Lat. Long. Mining Division Slocan Kootenav District Division minière District County Township or Parish Comté Canton ou paroisse Lot Concession or Range Lot Concession ou rang Sec Tp. R. Sect. R.

**TERRITORY** 

## OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

The Consolidated Mining & Smelting Company of Canada Ltd.. Trail, B.C.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT The country rocks consist of slates, phyllites, schists, quartzites and limestones of the Lardeau series. The beds exposed on the peninsula where the mine is situated, strike slightly east of north and dip westerly at 35°. Granitic intrusives related to the Nelson batholith occur in the surrounding area. Pegmatitic sills, ranging from less than an inch up to six feet, are found in the limestone. The sills are cut by steeply dipping green dykes, up to 5 feet in thickness, which occupy cross fractures in the beds. The ore occurs as replacement deposits along steep cross fractures in the limestone. Bedding planes and minor structures tend to localize the deposit. The ore consists of galena, sphalerite, pyrrhotite, pyrite, arsenopyrite, and chalcopyrite. The gangue occurring with the sulphides consists of carbonates, coarselycrystalline quartz, and Knebelite, an iron manganese olivine mineral. Oxidation of the deposit has occurred to depths well below lake level.

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

The large surface showing was known to early fur traders and was brought to the attention of mining capital as early as 1865. The first claims were located in 1852 and development work was begun two years later. By 1891 about 70 claims had been staked in the surrounding area. From 1888 to 1896 the mine was operated by the Kootenay Mining & Smelting Co. Ltd.

In 1906 the property was taken over by the Canadian Metal Co. Ltd. Due to financial difficulties the company was reorganized in 1911 under the name of the New Canadian Metal Co. They worked the property intermittently for about 20 years. There are three known centres of mineralization in the mine, spaced at approximately 1,500 foot intervals along the strike of the limestone. These three ore zones are known from north to south as the Comfort, the Bluebell, and the Kootenay Chief. At the time the mine closed an inclined shaft had been sunk on the Comfort ore zone and an adit driven on the Kootenay Chief claim.

The Consolidated Mining and Smelting Company of Canada Ltd. acquired the property in 1931 and did some exploration work on the Bluebell, Comfort and Kootenay Chief claims, however the mine was not reopened. Further diamond drilling was done in 1942 but the results were not encouraging. In 1947 diamond drilling was done along about 5,000 feet of limestone outcrop and the three orebodies mentioned above were outlined. The mine was reopened the following year.

Since 1947 an inclined shaft, located between the Bluebell and Kootenay Chief ore zones, has been sunk for 1,876 feet to a vertical depth of 810 feet. Development work has been carried out on all levels from 225 to 875 feet. A large volume of water enters the lower workings of the mine.

Development work during 1961-62 consisted of 11,482 feet of drifting and crosscutting, 7,918 feet of raising and 34,103 feet of diamond drilling.

The mine closed in December 1971 due to depletion of the ore reserves.

Approximately 500,000 tons of mill tailings containing zinc, lead and silver were dumped on the shore of Kootenay Lake in the early 1900's. Most of this material eventually slid to the bottom of the lake, 128 metres deep and 290 metres offshore.

(Mining Magazine, December 1983, p. 446)

# HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION .

From 1895 to 1960, 2,571,175 tons of ore were shipped from this property. From this ore 3,614,086 ounces of silver, 2,593,750 pounds of copper, 259,827,510 pounds of lead, 251,414,551 pounds of zinc and 1,126,528 pounds of cadmium were recovered.

During the two year period 1961-62, 490,563 tons of ore were shipped from this property. From this ore 615,350 ounces of silver, 532,200 pounds of copper, 43,592,912 pounds of lead, 52,718,761 pounds of zinc and 276,253 pounds of cadmium were recovered.

Total production for the period 1895-1971 totals 5,323,586 tons. From this ore 285 ounces of gold, 6,130,889 ounces of silver, 6,294,950 pounds of copper, 515,300,410 pounds of lead, 548,667,827 pounds of zinc, and 2,517,329 pounds of cadmium were recovered.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 603 A, Nelson, (Geol.), Sc. 1":4 miles - accomp. Mem. 228.

Map 82 F/15 W, Kaslo, (Topo.), Sc. 1:50,000.

# REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par			DMacR		
Date Date	04-73	05-75	05-84	 	
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