BIG BONANZA (SILVER CHIEF, KHEDIVE)
(BULL CREEK MINE)

R.

OBJECT LOCATED - from BCI 82 G/N - 2.

Lat. 49°30'12" Long. 115°23' UNCERTAINTY IN METRES 300.

Tp.

Mining Division Fort Steele

Kootenay District

County

PRODUCT

Township or Parish

Lot

Concession or Range

Sec

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The area is underlain by rusty weathering argillite, siltstone, and quartzite of the Precambrian Aldridge Formation (Map 11-1960). Early work was done on a sheared fracture which was traced for over 1,000 feet in an east-west direction along the contact of a diorite dyke and quartzite. Small lenses of mineralization were encountered at numerous points along its strike. The mineralization varies in character, in places being principally copper, and in others silver-lead-zinc. (Report of Minister of Mines, 1927, p. 266). "This deposit at the Bull River mine comprises chalcopyrite as fracture fillings and massive replacements in quartz siderite gangue that occurs in vein networks" (Geol. Exploration & Mining, 1973, p. 84).

HISTORY OF EXPLORATION AND DEVELOPMENT The property is located 14 miles due west of Fernie, extending north from the Bull River, astride Burntbridge Creek, between 3,000 and 3,500 foot elevation.

A number of claims were located in the vicinity of Burntbridge Creek in about 1896. The Silver Chief, Silver Reef, and Silver Buckeye claims were owned by David Griffith of Wild Horse Creek. Development work was done in a 100 foot crosscut adit and 15 foot shaft. The Daisy Fr. claim, owned by Thomas Bevans, was developed by shallow pits and open cuts. The Silver Chief (Lot 3548) and Sirdar (Lot 3554) were Crown-granted to Dave Griffith in 1899.

No further activity was reported until 1927 when the Silver Chief, Sirdar, and Khedive claims were owned by A.B. Fenwick of Bull River. The workings at that time included a crosscut adit about 130 feet in length.

The ground was subsequently restaked butno further activity was reported until 1968.

Mineral Lease M-69 comprising Lots 14717-14752, which included the Big Bonanza 1-4, June 1-6, and Bonanza 1-30 claims, was owned in 1968 by J. Van Koughnett.

Placid Oil Company optioned the property and during 1968 carried out geological mapping, a magnetometer survey. trenching and stripping. A number of old pits and 1,500 feet of old adit were cleaned out. Diamond drilling was done in 23 surface holes (7,414 feet) and 5 underground holes (1,018 feet). The property was expanded to include 62 located claims. Exploration work during 1969 included soil sampling, induced polarization and electromagnetic surveys, and 17,766 feet of surface diamond drilling in 45 holes. This work indicated two orebodies amenable to open pit mining. A 750 ton per day mill was built and milling operations commenced on October 1, 1971. Mining had begun in Pit 2 in August with commencement of overburden removal. Exploratory drilling totalling 3,833 feet was done in the vicinity of the tailings pond. Preproduction stripping of No. 1 pit began in 1972. Mining in No. 2 pit was completed in April 1973 and operations transferred to No. 1 pit. After completion of No. 2 pit, the pit was backfilled with material from No. 1 pit and almost completely refilled. Mining ceased in March 1974 because of depletion of open pit ore reserves. Milling of stockpiled ore continued until June 10th, 1974. when operations ceased. p.t.o.

HISTORY OF PRODUCTION

Although milling operations began in October 1971 there is no available record of production for that year.

During the period 1972-1974 inclusive, 520,182 tons of ore were milled. From this ore 4,055 ounces of gold, 204,277 ounces of silver, and 15,996,937 pounds of copper were recovered.

MAP REFERENCES

Map 11-1960, Fernie, (Geol.), Sc. 1":2 miles.

Map 82 G/11, Fernie, (Topo.), Sc. 1:50,000.

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

Generalized geological map of the Purcell Supergroup, Sc. 0.6 cm:1 km, Fig. 30, Geological Fieldwork, 1978, p. 114.

REMARKS

Comp./Rev. By DMacR DMacR Date 12-77 01-86

REFERENCES

Reports of Minister of Mines, British Columbia: 1898, p. 1006; 1899, p. 841; 1927, p. 266 ++; 1968, p. 269.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 348; 1970, p. 476; 1971, p. 417; 1972, p. 65; 1973, p. 84 +; 1974, p. 79.

Geological Fieldwork, British Columbia Dept. of Mines: 1978, p. 117; 1979, p. 115; 1983, p. 105.

Exploration in British Columbia; British Columbia Dept. of Mines: 1982, p. 77.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

In order to determine the feasibility of mining the underground reserves the company elected to sink a 700 foot exploration decline to intersect zone A, however, after several abortive attempts to collar the portal, the program was abandoned due to very blocky ground which could not be economically stabilized. Reserves are reported as 90 720 tonnes at 1.3% Cu, 0.31 g/mt Au, 21.77 g/mt Ag (BCPM Reserves Map, 1984).

In 1982 R.H. Stanfield carried out an airborne electromagnetic survey and 123.7 m of diamond drilling in one hole.

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