

NAME OF PROPERTY

RED CLIFF

OBJECT LOCATED - adit symbol, Map 217 A.

UNCERTAINTY IN METRES 200. Lat. 56°05'40" Long. 129°53'40"

Mining Division Skeena District Cassiar

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

Country rocks in the mine area include part of a thick sequence of well-bedded red and green volcanic sandstones and conglomerates intercalated with irregular, porphyritic andesite flows. These upper Lower Jurassic units lie on the west limb of the American Creek anticline, and are overlain by volcanoclastic rocks of the lower Middle Jurassic Bitter Creek Formation. The stratified sequence has been transected by the extensive, north-westerly trending, Tertiary, Portland Canal dyke swarm which lies immediately south of the mine area. The country rocks have been extensively fractured and deformed locally. The lower part of Lydden Creek has been eroded along a northerly trending, west-dipping cataclasite zone which represents an extension of the main Bear River cataclasite zone. The Lydden Creek fault has truncated the ore zone below 700 level thereby limiting any extension of the known mineralization to depth. As shown by the geologic sections of the old mine, development above 700 level has been on the hangingwall of the fault, but east of the apparent projection of the 700 level ore-grade mineralization. see Card 2

Associated minerals or products of value - Gold, silver.

HISTORY OF EXPLORATION AND DEVELOPMENT

This property is located on Lydden Creek about 11 miles north-northeast of Stewart. The central portion of Lydden Creek flows southerly almost parallel to American Creek. The Red Cliff group is located along this portion of the creek. The Big Casino claim group lies to the west and adjoining. To the northwest and adjoining lie the Bull Frog and Emily Edith claims and, adjoining these, the Red Cliff Extension group.

The Red Cliff group was originally held by Messrs. Lydden, Pederson, McDonald, and Peardon, who prospected the showings by open cutting in 1908. The Red Cliff Mining Company Limited was formed in 1909 to explore the showings. Seven claims, the Red Cliff, Montrose, Mount Lyall, Little Pat, and Waterloo (Lots 75-79), respectively, and the Moo and Dot fractions (Lots 86-87) were Crown-granted to the company in 1910; the Last Chance claim (Lot 88) was Crown-granted several years later. The Canadian Northeastern Railway was completed from Stewart to the property in 1911 and some 1,200 tons of ore were shipped the following year. Development work from 1909 until the mine closed in 1912 was done on 4 levels, and interconnecting raises, over a vertical distance of about 400 feet and totals some 8,200 feet of crosscuts, drifts and raises.

The mine lay idle until 1921 when it was purchased from the company by the R.W. Wood and W.R. Wilson interests. Surface work during the year on the upper showings did not prove encouraging and work was discontinued. No further activity was reported until 1939 when H.D. Haywood optioned the property from the Wood and Wilson estates. A showing at the 1,900 foot elevation on the Montrose claim was explored and a small shipment of ore averaging over 2 ounces in gold per ton was made from open cuts.

The Yale Mining Company, Limited, optioned the property in 1946 and sampled the showing from which the gold ore was shipped. During 1950 Yale Lead and Zinc Mines Limited completed about 2,000 feet of diamond drilling in a number of short holes, apparently on this same showing. Orofino Mines Limited held the claims under option from Yale Lead and Zinc Mines Limited in 1959 but no work was reported at that time. Yale Lead & Zinc Mines amalgamated with Mogul Mines Limited, and others, in 1968 to form International Mogul Mines Limited. Citex Mines Ltd. in October 1972 acquired a 3-year see Card 2

HISTORY OF PRODUCTION

From 1912 to 1940, 1,283 tons of ore were shipped from this property. From this ore 160 ounces of gold, 38 ounces of silver, and 88,949 pounds of copper were recovered.

Production in 1973 is reported at 4,154 tons, no content given.

MAP REFERENCES

Geological Map of the Stewart Area, Sc. 1": $\frac{1}{2}$ mile, Fig. 3, Sheet B, accomp. Bulletin 58, B.C. Dept. of Mines.

Stewart Area, Crown-grant claim map, Fig. 15 B - accomp. Bulletin No. 58.

Map 216 A, Bear River, (Geol.), Sc. 1":1 mile - accomp. Memoir 159.

#Map 217 A, Bear River, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR						
Date	5-76						

REFERENCES

McConnell, R.G.; Portions of Portland Canal and Skeena Mining Divisions, Skeena District, B.C.; Memoir 32, pp. 47-50, Geol. Surv. of Canada, 1913.

Reports of Minister of Mines, British Columbia: 1908, p. 56; 1909, p. 67; 1910, pp. 79-81; 1911, pp. 72, 74; 1912, pp. 104, 107; 1921, p. 66; 1939, p. 66; 1940, p. 52; 1946, p. 79; 1950, p. 78; 1959, p. 8.

Hanson, George; Portland Canal Area, British Columbia; Memoir 175, p. 141, Geol. Surv. of Canada, 1935.

Mineral Development Sector; Corporation Files: "Red Cliff Mining Company Limited"; "Citex Mines Ltd."; "Adam Milling Ltd."

Grove, Edward W.; Geology and Mineral Deposits of the Stewart Area, British Columbia; Bulletin 58, p. 151; British Columbia Dept. of Mines, 1971.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1973, pp. 494 + .

NAME OF PROPERTY

RED CLIFF

DESCRIPTION OF DEPOSIT (continued)

The potential upper limits of the known ore zone is the present rock surface.

In the mine area the country rocks include highly altered and sheared green andesitic volcanic conglomerates, red feldspathic sandstones, minor argillaceous siltstone, and variably porphyritic thin andesite flows. Primary sedimentary structures indicate that the local sequence trends northerly and dips westward at about 70 degrees. Locally these stratified units have been extensively cataclastically deformed producing intersecting sets of shears represented at the mine by narrow altered semi-schist, proto-mylonite, and mylonite. These zones and the less deformed rocks have been offset by younger, northerly trending faults.

The ore which occurs as lenses within the shear zones consists largely of coarse-grained milky quartz as veins containing pods, lenses, and streaks of pyrite and chalcopyrite which are the dominant sulphide minerals. Other mineralization, also largely confined to the shear zones, comprises disseminated pyrite and chalcopyrite with minor quartz. Pyrite is also common within the younger fault breccia zones and along the younger fault planes. Rock alteration in the various mineralized and other shears consists mainly of sericite and carbonate with superimposed carbonate-quartz as veinlets and segregations.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

lease on Lots 75-79 from International Mogul. A subsequent agreement with Adam Milling Ltd. called for the latter company to put the property into production by October 31, 1973. A 125 ton per day mill was built at the junction of Bitter Creek and Bear River. The mine reopened in April 1973 and the 700 level was rehabilitated. The exposed ore in the drift backs was open stoped and endangered the safe removal of additional ore on that level. Production ceased in September. Diamond drilling was carried out during November. The ore produced and the old dump from the 1930's were transported to the mill. Adam Milling sold their mill in 1974 and it was removed from the area.