104A/4W 104A-36, 1939 RED CLIFF GROUP J. T. Mandy This group of five Crown-granted claims and two fractions, was optioned by the R. W. Wood and W. R. Wilson estate to H. D. Haywood of Vancouver. It is located on the west side of Bear River, about 1 mile up Lydden Creek and about 15 miles from seaboard at the town of Stewart. The property is reached by motor-road from Stewart for 14 miles to 420 feet elevation and thence by pack-trail for about 2 miles to the tent camp at 1800 feet elevation. The locality of the claims is underlain by andesitic volcanic rocks of the Middle Hazelton group (Bear River series), locally intruded by irregular areas of augite porphyry. The mineral deposit consists of irregular lenticular areas of silicification of moderate size and up to about 100 feet long and from 4 to 17 feet wide, irregularly mineralized with streaks, patches and dissemination of pyrite, pyrrhotite, chalcopyrite, with which stringers carrying galena and sphalerite, are locally associated. Several years ago fairly extensive exploration

Several years ago fairly extensive exploration was done by the Red Cliff Mining Company, but no work has been done for a number of years. Reference to the property is contained in the Annual Reports of the Minister of Mines for the years 1908 to 1913 and 1921 and in Geological Survey of Canada Memoirs No. 32 and 175.

During the 1939 season, H. D. Haywood commenced exploration of a small lenticular area of mineralized silicification outcropping in Lydden Creek canyon at 1900 feet elevation on the Montrose claim. Although high-grade gold values in this showing are cited in old reports (1909, p. 68), very little work had previously been done on it. This showing was examined for the purpose of determining the possibility for the occumence of shipping-grade ore.

The showing consists of two adjacent lenses (No. 1 and No. 2), of siliceous replacement material on the north side of Lydden Creek canyon. The lenses are irregularly mineralized with mainly pyrite with which is locally associated minor quantities of chalcopyrite and on the foot-wall side, stringers carrying galena and sphalerite. The lenses are isolated and discontinuous and have not been sufficiently explored to determine their possible relation to any defined structure.

The main lens, No. 1, outcrops for a length of 35 feet, a height of 30 feet and a width of 10 feet. It strikes about north 10 degrees west and dips 80 degrees westerly. It cannot be traced on the south side of the canyon. At the base of the lens an old adit has been driven north 5 degrees west for 13 feet from where a crosscut extends west for 10 feet. A similar lens, No. 2, outcrops about 30 feet to the north-west of No. 1 lens.

To determine the possible occurrence and localization of shipping-grade values, the following samples were taken:

- 1) No. 2 lens, foot-wall side, a selected sample of gossan assayed: Gold, 3.70 oz. per ton; silver, 2.1 oz. per ton; copper, nil; lead, nil; zinc, nil; silica, 51.6 per cent.
- 2) No. 2 lens, a selected sample of pyrite occurring in stringers and patches, assayed: Gold, 2.26 oz. per ton; silver, 0.7 oz. per ton; copper, nil; lead, nil; zinc, nil; silica, 44.5 per cent.
- 3) No. 2 lens, foot-wall side, selected galena from stringer 1/2 to 11/2 inches wide: Gold, 5.90 oz. per ton; silver, 4.3 oz. per ton; copper, nil; lead, 44.7 per cent; zinc, 0.4 per cent; silica, 17.6 per cent.
- No. 2 lens, west end, hanging-wall side, selected pyritized siliceous material with chalcopyrite: Gold, trace; silver, 0.2 pz. per ton; copper, 2.4 per cent; lead, nil; zinc, 0.3 per cent; silica, 62.7 per cent.
- 4) No. 2 lens, west end, hanging-wall side, selected pyritized siliceous material with chalcopyrite: Gold, trace; silver, 0.2 oz. per ton; copper, 2.4 per cent; lead, nil; zinc, 0.3 per cent; silica, 62.7 per cent.

- 5) No. 1 lens at top, foot-wall side; selected galena from stringer 1/2 to 2 inches wide: Gold, 0.62 oz. per ton; silver, 4.0 oz. per ton; copper, nil; lead, 44.4 per cent; zinc, 3.6 per cent; silica, 14.9 per cent.
- 6) No. 1 lens, selected pyrite from face 10 feet wide above adit: Gold, 4.04 oz. per ton; silver, 0.8 oz. per ton; copper, nil; lead, nil; zinc, 0.3 per cent; silica, 34.2 per cent.
- 7) No. 1 lens, selected galena from patch in centre of face above adit: Gold, 3.36 oz. per ton; silver, 1.2 oz. per ton; copper, nil; lead, 20.1 per cent; zinc, nil; silica, 20.4 per cent.
- 8) No. 1 lens, foot-wall side, selected sphalerite from stringer, 6 feet above adit portal: Gold, 0.56 oz. per ton; silver, 0.2 oz. per ton; copper, 1.0 per cant; lead, nil; zinc, 20.6 per cent; silica, 29.1 per cent.

It must be stressed that these samples do not represent the general mineralization, but are of selected mineralization for the purpose of indicating the type of mineralization that could be selectively mined and cobbed in the process of extracting shipping-grade ore.

Subsequent to this examination, the following shipments were made to the Sampling Plant at Prince Rupert:

Dry tons	Gold oz.	Silver oz. per ton	Copper	Lead	Zine	Sulphur	Silica	*
1.7995 2.0105 0.9920 0.4465 0.0301	2.33 3.83 2.55 2.32 10.15	10.00 10.10 11.00 10.00 3.35	0.2 trace 0.4 1.0 trace.			7.6 7.1 13.0 19.9	58.4 58.2 26.6 22.8	