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COMMONWEALTH OF AUSTRALIA.



DEPARTMENT OF NATIONAL DEVELOPMENT.
BUREAU OF MINERAL RESOURCES
GEOLOGY AND GEOPHYSICS.

RECORDS.

Records 1956/122

REPORT ON AN OCCURRENCE OF COPPER ON HAASTS BLUFF

NATIVE SETTLEMENT

by

G. R. Ryan

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INTRODUCTION.

At the request of Welfare Branch, N.T.A., an examination was made on 17th October, 1956 of a copper prospect on Haasts Bluff Native Settlement.

The settlement lies approximately 150 miles west of Alice Springs and may be reached by graded road. It may be found towards the right hand central side of the Mt. Leibig 4-mile photomosaic. The copper show is about 6 miles east of settlement and about 1 mile north of the road to the settlement. The photoreference is Mt. Leibig Run 7 - Photo 5002 1.7" N x 2" E.

GEOLOGY.

Mineralization occurs in a body of coarse to medium-grained amphibolite associated with quartz and pegmatite intrusions. Metamorphic rocks form the country, and these consist of interbedded calcareous schists, marble, granulite, quartz-schist and amphibolite. Veins and masses of epidote may be found throughout the amphibolite.

The lineation and bedding strikes generally at 030 degrees, and lineation dips steeply to the north west. Minor folds and contortions are superimposed upon the overall trend. The amphibolite is irregular in thickness and discontinuous along the strike.

ECONOMIC GEOLOGY - COPPER.

Mineralization appears to be confined to the amphibolite, the copper minerals being predominantly malachite with some cuprite. Associated with these are oxides of iron, and epidote. Quartz, and pegmatitic material consisting of shattered feldspar and mica, occurs along the same line of strike, but rarely in association with the copper minerals.

Traces of copper may be found over a strike-length of about 900 feet, but in only two places toward the north end of the line, was concentration heavy enough to warrant attention. A fairly large representative sample was taken at each locality, and these gave the following assay results:

	<u>% Cu</u>	<u>% Insol.</u>	<u>Remarks</u>
1.	11.76	32.29	No radioactivity
2.	9.85	18.69	No radioactivity.

Iron oxides and epidote accounted for the bulk of the samples, and the presence of these gives a false impression as to the value of the ore. It is unlikely that even careful hand-picking could produce an appreciable quantity of ore of economic value.

It was hoped to examine two further copper shows, but the owner was unable to find them.

MARBLE

A specimen of marble was brought back to Alice Springs with a view to determining whether it has any economic value. No information is yet to hand.

The marble occurs as a relatively thin bed close to the copper lode. The extent of the body was not determined.

OPAL

It was hoped to examine an opal show in this vicinity, but the owner refused to divulge its whereabouts. Lack of silicification or lateritisation in the general area indicated, suggests that very little opal may be expected.

CONCLUSIONS

A copper show was examined about six miles east of Haasts Bluff Native Settlement. It is considered that the ore is too poor to warrant exploitation. A small amount of marble is present which might prove to be of value.