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BARITE DEPOSIT - HAROLD'S CROSS CAPTAIN'S FLAT DISTRICT

by

C.J. Sullivan

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MINERAL RESOURCES SURVEY.

DEPARTMENT OF SUPPLY AND SHIPPING.

BARITE DEPOSIT - HAROLD'S CROSS

CAPTAIN'S FLAT DISTRICT.

Report No. 1946/18.

Access.

The Harold's Cross Barite Deposit lies 7.5 miles slightly north of east from Captain's Flat. It is reached by following the present Braidwood road for a distance of 1.5 miles and then turning northeasterly along the old Braidwood road. This now leads to Gunn's saw mill. The deposits are situated on the north side of the road, 0.5 mile east of the saw mill. The last 2.5 miles of the track are very rough.

Past Production.

The area produced 80 tons of barite during 1917-18 and 303 tons during the period 1940-42. It was sold as third grade and the recent production brought 32/- per ton f.o.r. Captain's Flat.

General Geology.

Dense growth of under-brush and soil obscure the rocks to a considerable extent, but such outcrops as were noted in the vicinity of the deposits consisted of granite.

The Barite Deposits.

Four separate deposits were noted, each occupying a minor shear or joint plane in the granite.

Deposit A. has been tested by an adit 70 feet in length which trends in a westerly direction. It exposed a lode of barite varying in width from 6 inches to 14 inches. In places the barite is clean, but much of it contains silica and also a little galena and sphalerite. In some cases the lode channel contains only kaolinised material containing some barite. A small hole 140 west of the face of the adit has exposed a narrow veinlet of barite which may be on the continuation of the lode worked.

Deposit B. is parallel to and about 170 feet east of deposit A. A lode 6 inches wide is exposed at the western end of an open cut 73 feet long and 5 to 7 feet wide. The deepest part of the cut is now 16 feet below the surface, but it appears that workings have extended below this. The barite at the western end of the cut is of good quality.

Deposit C. lies about 300 feet east-south-east of the portal of the adit at deposit A. It has been exploited by an open cut trending east-west, which is 70 feet long and averages 4 feet wide and 12 feet deep. The small fragments of barite seen were siliceous.

Deposit D. lies some 400 feet south-east of deposit C. It trends at approximately 240 degrees and has been worked fairly continuously over a length of 240 feet. At the western end of this deposit a shaft which is now approximately 60 feet deep was sunk during World War I. to test the lode for lead and zinc. No gear was available to enable this shaft to be inspected. Some 240 feet east of the above shaft, a second shaft, 30 feet in depth was sunk during 1941 & 1942. A short crosscut off the bottom of this shaft has exposed a lode 2 to 3 feet in width which dips southward at 70 degrees. Part of this lode contains good quality barite but much of it is siliceous. A good deal of barite was stoped from this working and was sold as third grade at 32/- per ton.

Between the two shafts, irregular veins have been worked in open cuts 10 to 15 feet deep.

East of the 30-foot shaft, along the same line of lode, an open cut 70 feet long and 10 feet deep has been excavated. A vein of barite 6 inches wide could be seen on one wall of the cut.

Summary & Conclusions.

The barite at Harold's Cross occurs as narrow and irregular veins in granite. The quality of the barite is not uniform, much of it containing silica, galena and sphalerite. It has been sold as third grade material the price paid being 32/- per ton f.o.r. Captain's Flat. In some instances the enclosing granite is cut by greasy heads which would render timbering necessary. The cost of cartage to Captain's Flat is normally 8/- per ton.

Considering the above factors it is doubtful if the deposits inspected could be worked at a reasonable profit. Further tonnages of 3rd grade barite could undoubtedly be obtained from the deposits inspected and further deposits may exist below the soil and scrub cover. However, this grade is at present over-supplied from larger and more cheaply worked deposits.

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