

COMMONWEALTH OF AUSTRALIA.

DEPARTMENT OF NATIONAL DEVELOPMENT.
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GEOLOGY AND GEOPHYSICS.

RECORDS.

1955/70

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OCCURRENCES OF BERYL. MOUNT ISA DISTRICT

by

E. K. Carter.



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The only source of beryl in the district, known to have been worked, is the Big Beryl Mine, $5\frac{1}{2}$ miles south-west of Mt. Isa. The following production figures have been compiled by J. H. Brooks from Queensland Department of Mines records:

	<u>Tonnage of Beryl produced</u>	<u>Value £.</u>
1942	-	-
1943	7.0 tons	112
1944	5.9 "	105
1945	-	-
1946	8.9 "	272
1947	-	-
1948	12.0 "	440
1949	9.5 "	385
1950	6.0 "	609
1951	10.3 "	934
1952	-	-
1953	-	-
1954	<u>7.2 "</u>	<u>1251</u>
	66.8 tons	£4108

Production ceased last year as a result of the death of one of the mine owners, who worked it single-handed, the other being overseas.

A description of the working is given by S.R.L. Shepherd in Queensland Government Mining Journal, Vol. 47, No. 532, page 51 - February, 1946, together with a description of the area, as a result of inspections in May and September, 1944. Shepherd records the existence of beryl in non-economic quantities 4 miles south-south-easterly from the Big Beryl Mine and of small isolated crystals of beryl in quartz veins near the mine.

I inspected the workings on 7th July, 1955. They consist of an open cut of great length 89', depth 41', and maximum width approximately 15'. Access was obtained by a 30' vertical shaft in the hanging wall near the southern end of the open cut, joined to the open cut by a 4' tunnel. The hanging wall of the open cut dips roughly 65°W .

At the northern end of the open cut is a prominent quartz blow. A trench 12' x 2' wide had been dug immediately to the west of the blow. Another pit has been dug in pegmatite at 350' distance on bearing 020° from the quartz blow. No beryl was observed in either of these openings.

In the open cut pegmatite is exposed at both the southern and northern ends. The western-hanging wall- of the cut is of amphibolite and the footwall of a dark mica schist.

The southern exposure of pegmatite could not be adequately inspected for the presence of beryl but at the northern end beryl was observed at two points, as marked on the longitudinal section attached. The more northerly face showed garnet-bearing mica-felspar pegmatite over a width of 2 feet, with beryl constituting not more than 5% of the bulk. The second exposure of pegmatite is 16 inches wide and contains perhaps 15-20% beryl.

The floor of the open cut is covered with rubble. It is not known how deep the winze shown on the sketch was originally or what was exposed in it. It is now almost entirely filled with mullock.

A brief examination of some of the numerous pegmatites within 200 to 300 yards of the Big Beryl Open-Cut suggested that the beryl-bearing pegmatite is more micaceous than most of the others. No specific search for beryl was undertaken.

Mount Isa Mines Ltd. have no information later than 1944. A company report was made by R. Blanchard and G. Hall in 1942. In it they refer to an area of one square mile, with the Big Beryl mine in the north-east corner, in which pegmatites are numerous and which contains beryl.

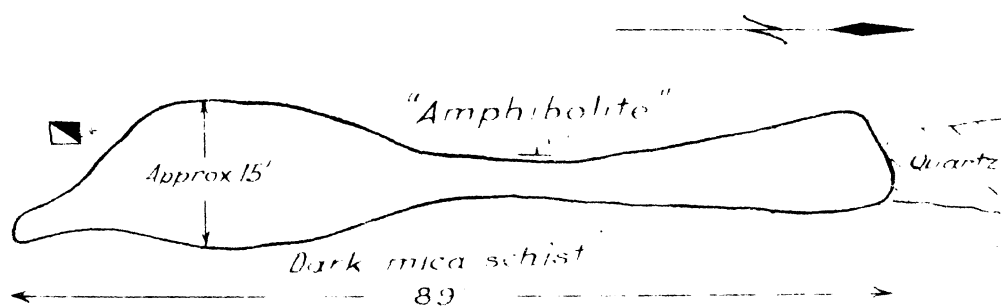
Four analyses made in 1942-44 shows the beryllium content of beryl from the Big Beryl Mine as 12.49% to 12.85%.

Prospects

Regular production of beryl from the Mica Creek area cannot be expected. Further beryl can be won from the Big Beryl open cut, but only, as in the past, on a "weekend gouging" basis. The quartz blow marks the limit of possible northward development. Any further winzing to test a depth must be on a trial and error basis.

It is suggested that if Governmental agencies are interested in increasing the output of beryl this can best be served in the Mt. Isa District by encouraging "weekend gougers". The attention of such people to beryl as a source of additional income could be drawn by a press release in a local newspaper or perhaps an article could be printed, by arrangement, in either Mount Isa Mines Ltd.'s "Mimag" or in the Queensland Government Mining Journal. The proximity to Mt. Isa of the Mica Creek area should appeal to part-time prospectors and gougers.

Rough Surface Plan (Not to Scale)



Rough Longitudinal Section Looking West (Not to Scale)

