

BERYLLIUM IN PEGMATITES*

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Recently, notes have been published on spectrographic investigations of beryllium in pegmatites¹ and in wallrocks of pegmatites.² Some fragmentary information on this subject was obtained by the writer in 1944 during a study of some muscovite-bearing pegmatites in the Big Bend area near Golden, British Columbia. In the course of field-work near the head of Yellow Creek, beryl was found in a pegmatite once worked for muscovite. In an attempt to determine whether the presence of this beryl might be suggested by the occurrence of beryllium as a minor element in other minerals nearby,³ two samples of muscovite, one of biotite, and one of feldspar from the pegmatite, and samples of kyanite and garnet from the adjacent wallrock were selected carefully and were spectrographed. Traces of beryllium were detected in all samples except in one of muscovite and one of feldspar.⁴ For comparison, samples of muscovite, biotite, feldspar, quartz, kyanite, and garnet from the Blue River area about 50 miles west of Yellow Creek were spectrographed. Field examination by S. S. Holland of some pegmatites in this region had not revealed any occurrence of beryl. A trace of beryllium was found in the sample of muscovite from Blue River, but it was absent in the samples of the other five minerals. In summary, these meager data suggest that the number of minerals which contain traces of beryllium is greater in the area in which beryl occurs than in the area in which it may be absent.

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¹ Perry, Eugene S., and Cooke, S. R. B., Spectrographic prospecting for beryllium in pegmatites of western Montana: *Am. Mineral.*, **31**, 499-502 (1946).

² Stoll, W. C., The presence of beryllium and associated chemical elements in the wallrocks of some New England pegmatites: *Econ. Geol.*, **40**, 136-141 (1945).

³ Quirke, T. T., and Kremers, H. E., Rare element prospecting in pegmatites: *Econ. Geol.*, **38**, 173-187 (1943).

⁴ Analyzed by Chief Analyst and Assayer, British Columbia Department of Mines.