

## REPORT ON THE EXAMINATION OF A GRAPHITE PROSPECT NEAR FRENCH CREEK, FAIRBANKS DISTRICT

In the early part of July, 1958, Mr. Dan Goben, Assistant Fire Chief at Eielson Air Force Base, brought in some specimens that he thought contained molybdenite. Examination of the specimens proved that the material he thought to be molybeenite was actually graphite. Because some of these specimens appeared to be fairly high-grade in graphite content, and because Mr. Coben reported that the deposit was readily accessible by road, a field examination was considered to be worthwhile. The examination was made on July 15, 1958, by Robert H. Saunders. Territorial Mining Engineer; transportation was provided by Mr. Coben.

The deposit is less than one mile outside the east bounday of Eielson Air Force Base, as shown on the accompanying map. It is on the crest of a ridge that separates the drainage of French Creek, on the south, from the drainage of Moose Creek, on the north. A gravel road from Eielson Air Force Base goes along the top of the ridge; this road extends much farther than is shown on the accompanying map.

The graphite-bearing material is a horizon of graphitic schist that is a part of the pre-Cambrian Birch Creek Schist formation. The graphitic schist is exposed in pits that were dug to obtain material for road-building. The deposit appears to be about 20 feet thick, and it strikes approximately parallel to the top of the ridge.

During the field examination it was readily apparent that the deposit as a whole is much lower in grade than the specimens that had been brought in by Mr. Coben, and, in addition to impurities within the graphitic schist, there are numerous small quartz stringers cutting across the deposit that further decrease the grade. Laboratory tests made later on some of the better looking specimens showed that even they contained only three per cent fixed carbon, much too low-grade to be of any commercial importance.

In late July of 1958, the Air Force announced its intention to withdraw from the public domain a tract of land adjacent to Eielson Air Force Base on the east. The exposures of graphitic schist are within the area to be withdrawn.

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Robert H. Saunders

Territorial Mining Engineer