PE-121-04

## TERRITORY OF ALASKA

## DEPARTMENT OF MINES

BOX 1391 JUNEAU, ALASKA

## PROPERTY EXAMINATION REPORT

As a result of a request by the LAZO property holders, the undersigned made an examination of their radioactive prospects on July 16, 1955. Several widely scattered narrow veins or exposures that caused high radiometric indications were investigated and sampled. Two samples of selected material were assayed radiometrically at over 3% eU, but the bulk of the radiometric material in these samples was determined to be thorium. The remainder of the samples taken during the investigation gave low results. The property lies in a favorable area where some significant uranium discoveries have been made.

The LAZO property consists of claims named as follows: Anita, Old Crow, Lucky Dog, Arlene No. 1, Happy Day, Beverly, Linny, Noon Day Mist, Steep Grade, Snow White, Sunny Weather, Landslide, Moira Side, and Hope. These claims are staked on Weinnie (or Weinner) Lodes No's. 1 to 14 in the order named. The owners are Herman Ludwigsen, Arnt Antonsen, Edward R. Zaugg, and Clarence A. Olson, all of Ketchikan. The locations were made in June, 1955.

The location of the property is on the southern part of Prince of Wales Island and in the northeast corner of the Dixon Entrance quadrangle

at approximate geographical coordinates of 132°11' W longitude and 54°55' N latitude. It lies on the westerly slope of Bokan Mountain, just east of the head of the South Arm of Moira Sound. Ketchikan lies 38 airline miles to the northeast. Elevations on the various claims are from 560 to about 2000 feet. There are no well-defined trails from the beach to the claims, but the walking is not difficult. Trees and overburden cover the country up to about six or seven hundred feet on this side of the mountain, above which the slopes are usually bare. On the southeastern side of the mountain, timberline is higher. A vicinity map is attached to show the situation of the property. The claims were not mapped.

Bokan Mountain, on which the prospects lie, appears to be an intrusive stock containing mostly diorite. Numerous gradations of rock are present however, and on the western slopes in the area of the prospects concerned in this report, the rock runs more to a granodiorite and possibly even a granite, locally. Structurally, the radioactive zones seem to be controlled by fractures and joints, but these zones do not show any obvious correlation with particular rock types. Also, there are many fracture zones or joints not mineralized.

The mineralized areas are colored from light tan to a dark rustbrown from iron staining. Whether this iron staining and radioactive
mineralization happened simultaneously is an unsolved question, but it was
noted that the darker colored material within any "hot" zone generally
carried the most radioactivity. On the other hand, many stained zones in
the area have been checked that were found not to be radioactive. The
writer checked several of these personally in the course of the examination.

The mineralized zones within the LAZO group are narrow and widely scattered. Most of them were sampled. The best showing was a fracture zone about 18 inches in width at an elevation of 810 feet. A channel sample across this exposure was assayed at 0.05% eU, although selected samples from here assayed 3.5 and 3.25% eU. Other samples gave results of 0.05% or lower. However, thorium was found to be the chief radioactive element, rather than uranium. The minerals have not been identified. Samples JW55-9 through 13 were taken. The assaying was done by Arthur E. Glover, TDM Assayer at Ketchikan.

On the other side of Bokan Mountain toward the head of the West Arm of Kendrick Bay, a number of other uranium discoveries were made during the past season, at least two of them quite significant. The geology and rock types there are practically the same, and there is one large east-west trending structure (pegmatite or fault) along which many good indications have been found. This places the LAZO group in a very favorable area which is a point in the property's favor. Further prospecting could quite possibly reveal better radioactive deposits than have been found thus far.

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