(15.2.18.2)
56°54'
134°46'W

FE-116-5

TERRITORY OF ALASKA

DEPARTMENT OF MINES

JUNEAU, ALASKA

8 July 1951

KX116-1

SUMMARY REPORT

TO: Leo H. Saarela, Commissioner of Mines, Juneau, Alaska

FROM: James A. Williams, Associate Mining Engineer, College, Alaska

SUBJECT: Examination of Keku Group Property, Kuiu Island, Petersburg Precinct.

The Keku Group Property was examined on 22 June 1951 by Leo H. Saarela and James A. Williams.

The property is owned by Oscar Elison and Louis Dyrdahl, and is composed of 32 claims on the east side of the northernmost peninsula of Kuiu Island. The geographical coordinates are 134°46' W long. and 56°54' N lat. The association is also referred to as the Kuiu Zinc-Lead Company.

Previous reports and maps of this property by J. C. Roehm, former Associate Mining Engineer, are on file as a result of examinations made by him on 15 May 1937 and 6 May 1941.

The only underground workings examined was an adit on the right limit on No. 1 Creek at an elevation of about 100 feet above sea level. This is on No. 9 Claim. The adit was closely examined and mapped, and the map (by Saarela) is included with this report. Thirty feet in from the portal is a winze which was full of water, and its depth is not known.

A bunkhouse is located at the mouth of No. 1 Creek, but no milling or excavation equipment was in evidence. The x on the upper left corner of the accompanying aerial photograph shows the approximate location of the adit, and the bunkhouse is designated by the dot on the beach.

The area is one of a basic lava, mostly green, overlain by quartzite, limestone, sandstone, breccia, and schist; all fractured and faulted. The two main faults in the adit can be seen on the map. In some spots, a leached-out andesitic material in the form of clay was noted.

The property is a zinc-lead-manganese [illegible], but sufficient mineralization to create commercial interest was evident to the examiners. It will be noted in Roehm's report although he refers to "ore" a number of times, the assay results on the samples he took

do not indicate a commercial concentration of minerals. According to Roehm's map dated 6 May 1941, there have been twelve diamond drill holes sunk in the vicinity of the adit. What the cores of these holes revealed is not known by the writer, but from the way the holes were placed, they should have revealed whether there was mineralization sufficient to warrant further development work in that area.

The adit was checked for fluorescent minerals with an ultra-violet light with negative results.

A Victoreen Model 263A Geiger Counter was used in the adit and throughout the area to check on the possibility of uranium-bearing minerals. A high count was detected on the surface wherever there was no overburden and in the adit, but it was probably caused by a thorite rather than any uranium mineral. Some of the higher counts obtained in the adit are indicated in their proper location on the map. Sample LHS-1951-10 was taken at the location of the highest count. This sample, when carefully assayed at the Juneau Office, gave a count considerably less than was recorded at the sample point in the adit, which indicates that the high count on the property might be due to the mass effect of much low grade radioactive materials. It was definitely established, however, that radioactivity was slightly higher in the gouge zones of the faults than where the rock had not been disturbed. It was from one of these zones that the sample was taken. Also it was noted that the leached-out andesitic clay was of a slightly higher degree of radioactivity than the surrounding material. The sample taken indicates a concentration of less than 0.005% equivalent uranium, which is not of commercial interest. The background count of the Geiger Counter where there was overburden averaged about 32 counts per minute.

The beach was also checked for radioactivity for a distance of 1200 feet as shown on the aerial photograph, and approximately the same amount of radioactivity was encountered as at the adit. No radioactive concentrate was obtained by panning. It was found that the silicious materials (andesitic lavas but not granite) had the high counts, while the massive limestone was low.

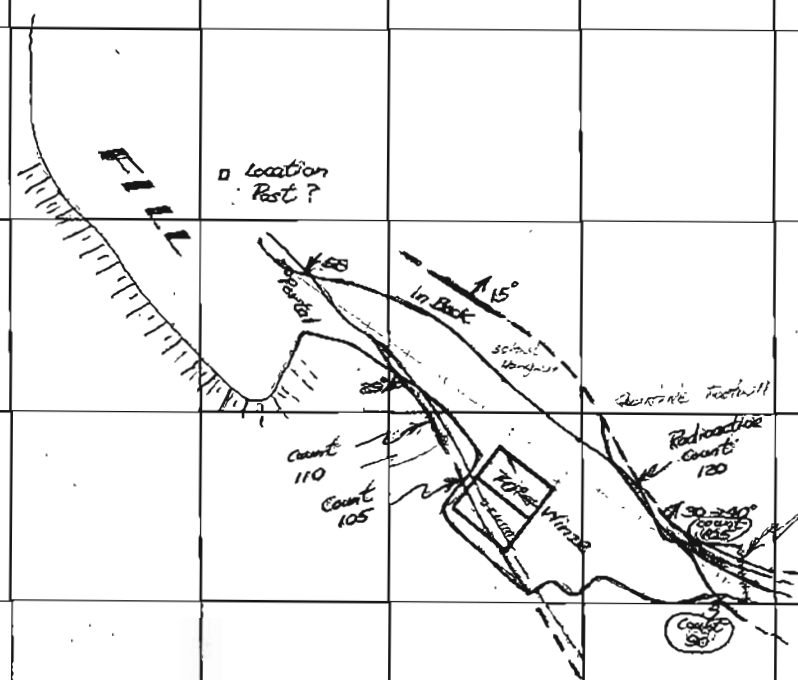
A commercially important deposit is not indicated, and as mentioned before, the radioactivity is probably that of thorium rather than of uranium. However, it is recommended that further efforts be made to isolate the material carrying the greatest amount of radio-activity and submit it for careful analysis.

Respectfully submitted,

JAMES A. WILLIAMS
Associate Mining Engineer

Revised Copy.
7/10/51
LHS.

Scale: 1" = 3500'



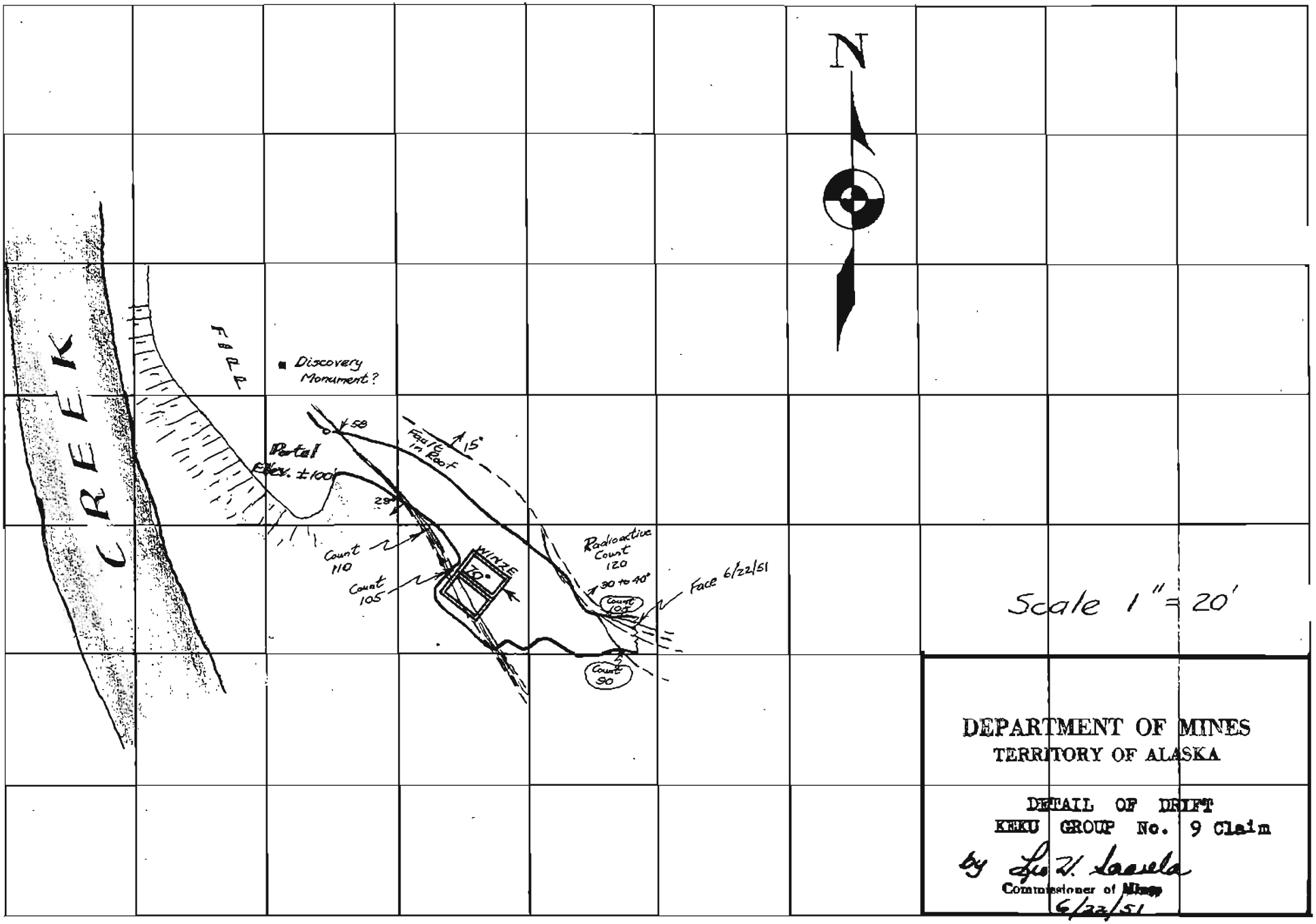
Scale 1 inch is 20 feet

DEPARTMENT OF MINES
TERRITORY OF ALASKA

DETAIL OF DRIFT
KEKU GROUP No. 9 Claim

by Leo H. Saarela June 22'51
LEO H. SAARELA
Commissioner of Mines

(Original)
(Field Sheet)


N
CREEK
FIELD
Discovery Monument?
Portal Elev. ±100'
+58
A 15°
Faults in Roof
28°
Count 110
Count 105
WINZE
70°
Radioactive Count 120
30 to 40°
Count 100
Face 6/22/51
Count 90
Scale 1" = 20'
DEPARTMENT OF MINES
TERRITORY OF ALASKA
DETAIL OF DRIFT
KEKU GROUP No. 9 Claim
by Leo V. Laurela
Commissioner of Mines
6/22/51

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