PE 85-4

TERRITORY OF ALASKA

#### DEPARTMENT OF MINES

JUNEAU, ALASKA

PRELIMINARY REPORT OF WEBFOOT PROSPECT, ARCHANGEL CREEK,
WILLOW CREEK DISTRICT, ALASKA
August 2, 1938
by J. C. Roehm, Associate Mining Engineer.

## Location and Accessibility:

The Webfoot prospect is located on the right limit of Archangel Creek below Sidney Creek and three-fourths of a mile southeast of the Fern mine. The group of five claims, one of which is patented, extends from the camp on the Fern road west and across the top of the projecting mountain ridge.

#### Owners:

The property is held by M. G. Gaikama and J. Conroy of Anchorage, Alaska.

## <u>History:</u>

The Webfoot vein was discovered in 1909 by W. H. Fiske and J. Conroy. The following year Fiske sold his interest to Frank Cannon. Considerable surface stripping was done in the years following. In 1921 G. Anderson optioned the property for the Little Gem Gold Mining Company. The present camp buildings were erected and 100 feet of tunnel work was accomplished. The following year the property was dropped. Since then an additional 25 feet of tunnel work has been done.

## Geology and Showings:

The geology of this district is best described in U. S. G. S. bulletin 607, "The Willow Creek District, Alaska" by S. R. Capps. The only formation contained in the claim boundaries and the surrounding area is quartz diorite.

Webfoot Vein: The Webfoot vein is exposed by surface cuts and stripping for 1,000 feet between elevations of 3760 feet and 3980 feet. Three quartz lenses occur on the vein over this distance and these range in length from 100 to 150 feet and contain widths of quartz up to 6 feet. The vein strikes north-south and dips 42° west. The quartz lenses are distinctly banded and contain gouge on both walls. The walls are somewhat altered and show movement, part of which has been post vein-filling. The texture of the quartz shows considerable strain and fracturing. The open fractures were refilled and cemented with calcite and other lime minerals which give the quartz a milky white color.

No. 1 Lense: The Webfoot tunnel was driven on the vein a total distance of 125 feet and exposes 78 feet of No. 1 lense. This lense has a length of 150 feet and ranges from one to six feet, averaging two and one-half feet in width. The quartz bands vary in width from very thin seams up to 12 inches. The quartz is only slightly mineralized with most of the mineralization impregnated in the wall rock. The lense appears to have a low rake to the north.

Sample No. 501 was taken across the lense, 29 inches, at a point 17 feet in from the portal and returns of 0.18 oz. gold and a trace of silver per ton were received.

No. 2 Lense: No. 2 lense is located north of No. 1 and has a length over 100 feet and an average width of two feet. The quartz is much the same character as No. 1 lense. Cuts and stripping expose this lense. Low gold values were reported.

No. 3 Lense: No. 3 lense shows the greatest amount of quartz and is located north of No. 2 at an elevation of 3980 feet. Its exposed length is over 100 feet and its average width is three feet. Considerable wall rock is, however, inclosed in the quartz bands. The quartz and bands are similar to No. 1 lense. Values ranging from low up to \$60 per ton in gold were reported. This shows a spotty distribution of the gold.

### Mineralization:

Pyrite was the only metallic mineral noted and this occurs mostly in the wall rock and along the edges of the quartz bands. The crystals are very fine and generally the mineralization is weak. The gold apparently is free. The gangue minerals consist of a milky white quartz, sericite, calcite, chlorite and various pieces and altered wall rock minerals.

There is no machinery on the property and the tunnel was apparently driven by hand. The camp buildings, located along the road in the valley floor, consist of a 12x28' cook house, a 16x24' bunk house and other small buildings in a poor state of repair.

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Excerpt from MINERAL RESOURCES of ALASKA, 1918 U.S.G.S. Bulletin 712, p. 176:

# WEBFOOT AND RUTLAND PROSPECTS

"Some development work was done by Gaikema & Conroy on the Webfoot and Rutland groups of claims, near the junction of Archangel and Fairangel creeks. The vein on the Webfoot is reported to be exposed by surface stripping for a claim length. Some development work was also done on the Gem prospect in the same locality. On the Fern and Goodell claims a tunnel was driven 300 feet along the lode, and work was continued during the winter."

Excerpt from MINERAL RESOURCES of ALASKA, 1919 U.S.G.S.Bulletin 714, p. 204:

## ARCHANGEL CREEK

"The Little Gem Gold Mining Co. bonded the Webfoot claims and other property on Archangel Creek and continued development work during the winter of 1919-20."