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Report on the

GLACIER CLAII. KX 85-36

Willow Creek District

by

Leo H. Saarela, Associate Engineer, Territorial Department of Mines. August 16, 1945.

LOCATION

The location of this property is about one and one-half miles north of the Fern Gold Kine and is at five thousand foot elevation. The claims are just north of the glacier occupying the eastern tributary of Archangel Greek.

PROPERTY AND OWNERSHIP

The property consists of three claims staked end for end at a bearing of about north forty east and beginning from the lower came at an elevation of thirty-eight hundred feet. These claims were staked in 1938 by Jacob Lane, who has developed the property since that time.

HISTORY

The original location of this vein is reported to have been in 1917 by the Barthof family. However, very little was done on account of the inaccessible location. The property remained open till 1938, when it was staked by its present owner who has spent every open season there and who has driven a twenty-five foot crosscut on the vein and exposed the outcrop for about one hundred fifty feet. The present equipment consists of a cabin at 3850 feet and a cabin and a blacksmith shop at 4860 feet.

G E O L O G Y

The country rock of the district consists of quartz diorite and the reader is referred to USGS bulletin No. 607 for further details of general geology in the district. Near the property there is a north-south fracture system which dips about forty degrees west. This fracture system is very pronounced and can be seen throughout the adjacent area north of the Fern Mine. Several dacite dikes cut the quartz diorite about a thousand feet north of the claims. These dikes have an approximate east-west strike and, as nothing has been found north of these dikes, it may be that they had a damming effect on the ascend-

ing solutions. The vein on the property is exposed at 2990 feet, has a strike of north nine degrees west, and dips about thirty-five degrees to the west. A twenty-five foot tunnel has been driven along the vein and the ore averages about a foot in width with considerable crushing and movement along both hanging wall and foot wall. On the hanging wall there is a stringer averaging from one to four inches in width, which is very high-grade. Free gold is visible in almost every piece from this portion of the wein. In driving the tunnel on the vein all ore material was carefully saved and there is about fifteen tone accumulated. The vein is exposed at 5020, 5050, 5065 feet and the dip throughout averages about thirty-five degrees to the west. The average voin width in these exposures is from ten to twelve inches. The narrow stringer of highgrade mentioned above is persistent in all these exposures. Assays as high as fifteen ounces have been obtained from this vein. However, no systematic sampling has been carried out as yet.

FUTURE DEVELOPMENT

The owner plans to install an aerial tran as soon as material becomes available. With this he hopes to install a compressor and do more extensive passpecting at the outcrop.

If this work proves favorable, he then expects to install a mill and camp in the valley floor where there is a good mill site with good protection and ample water.

Some float has been found at a lower elevation and it is suggested that more prospecting be done at this lower elevation. As the dip of the vein is almost parallel to the surface, there is an excellent possibility that the vein might be found at a much lower elevation. If the exposures there were as good as above it would eliminate the nauling problem and make it easy to work the property the year round.