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TERRITORY OF ALASKA

DEPARTMENT OF MINES

FOSTER LEAD-SILVER PROSPECT K+ 44-6

SEWARD PENINSULA, ALASKA

by

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INTRODUCTION

Mr. Neal N. Foster, who owns in partnership with J. F. Macumber the Foster Lead-Silver Prospect, requested the Engineer from the Nome Field Station of the Territorial Department of Mines to visit and examine his prospect.

The Foster Lead-Silver Prospect was visited on October 7th and 8th, 1952. During the examination a float survey was conducted, a sketch of the area was made and photographs were taken of the prospect and surrounding country.

The Prospect is located in the Darby Mountains at the head of Dry Creek a tributary of Omilak Creek a tributary of Mosquito Creek which is a tributary of the Fish River. The coordinates of the prospect are 65° 2' 24" Latitude and 162° 17' 11" Longitude. The general location can be seen on Plate 1, the Seward Peninsula Vicinity Map.

At the time of the examination the property consisted of one full size lode claim, since then 24 lode claims have been staked and are recorded in the Recording Book at Nome, Vol. 228, pages 267 to 287. All the claims are located within the Council-Bluff Mining District.

SUMMARY

The Foster Lead-Silver Prospect consists of twenty-four

lode claims. The workings todate comprise a large bulldozer excavation or open-cut and some smaller trenches which have been dug to determine the extent of the deposit and possible location of a vein system. It is reported that samples taken from float in the area assay from 1 to 50% lead and from 5 to 200 ounces of silver. However, as there were no outcrops of the vein visable, accurate sampling could not be nor was accomplished.

During the 1953 season the United States Bureau of Mines became interested in the Prospect and did some exploritory diamond drilling work on the Prospect. The results of their work is not known.

From geologic studies made at the Prospect and from studies of samples from the area it appears very likely that the material found is a true gossan deposit and that there exists the possiblity that there is a vein system in the countryrock. Therefore, it is recommended that a more intensive float survey should be made throughout the entire area and that the diamond drilling program initiated by the Bureau of Mines be continued to determine the extent of the deposit if one exists.

LOCATION and ACCESSIBILITY

A natural airstrip occurs on the left limit of Dry Creek where the creek leaves the Darby Mountains and entors the Fish River flat. This airstrip has since been enlarged by the Bureau of Mines to approximately 1,000 feet long and 200 feet wide. The flying time from Nome to the airstrip is approximately 1½ hours. The Prospect is in turn about five miles from the airstrip and can be reach by walking in about 1½ hours. A fair tractor trail follows the Creek Bed from

the airstrip to the Prospect. The specific location of the Foster Lead-Silver Prospect can be seen in Plate 2. the Map of the Omilak Region of which the Prospect is a part.

Supplies are carried into the area either by flying from Nome or Golvin or from tractors from Golovin. The latter is about forty miles from the Prospect. Plans call for a construction of a road if the exploration work justifies such an expenditure. Supplies use to be hauled into the area in the early part of the century by boating up the Fish River and it would be possible to do this again if sufficient supplies were required at the Prospect.

HISTORY of AREA

The Foster Lead-Silver Prospect is about five miles from the old Omilak Mine which was discovered in 1891 and mined for some years after that date. This mine and the geology of the area is described in U.S.G.S. Bulletin 449, A Geologic Reconnaissance in Southeastern Seward Peninsula and The Norton Bay-Nulato Region, by P. S. Smith and H. M. Eakin printed in 1911.

Since 1947, prospecting and exploration work han been carried on intermittenly at the Foster Lead-Silver Prospect. In 1948, the Prospect was visited by Bruce T. Thomas, Associate Mining Engineer for the Territorial Department of Mines, however, no report on the property was made from his examination.

During the 1953 season, the United States Bureau of Mines did some diamond drilling at the Prospect. This work was under the direct supervision of John Mulligan. The results of their work is not known by

this writer and could be obtained only from the Bureau of Mines, Juneau, Alaska.

TOPOGRAPHY and CLIMATE

The prospect is located at about an elevation of 1,400 feet above sea level at the head of Dry Creek on the west side of Dry Creek Mountain. Figures 1 through 5 show the various views of the prospect and of the surrounding area and give a fair idea of the rugged character of the mountain range.

The climate is semiarid and has an average precipitation of about 10 inches a year and an average temperature of about 25° F. There are strong winds throughout the area with the predominant wind from the north. The freeze up occurs generally around the middle of September and last until late May.

GEOLOGY

The deposit is massive galena in fractured and silicified limestone country rock. The geology is apparently similar to the Omilak Mine which is five miles to the west. The mountain range is interbedded schist and limestone with schistose limestone noted near the prospect. Massive silicified limestone forms a basin surrounding the prospect. An abundance of greenstone float indicates the presence of a basic dike in the country rock. The deposit is traced by limonite float which is probably in the nature of a gossan.

An examination of the prospect showed that the material found on the surface near the open-cut was almost entirely limonite with a few small crystals of galena remaining in some of the samples

also crystals of anglesite were noted as well as some cerussite. No Stibnite, however, was found in any of the samples from this prospect. The color of the limonite varied from chocolate brown to yellowish orange. Voids occured in most samples.

At the bottom of the open-cut and between 20 and 30 feet below the surface was found the principle mineral samples and from these and those found on the dump the general characteristics of the ore was established. All samples found, which ranged in size from pebbles to massive boulders, had a coating of limonite. The galena in the samples was for the most part well crystallized. Included in the galena were large crystals of pyrite and smaller crystals of chalcopyrite. Both of these were in a state of decomposition advanced from that of the galena.

From an old trench near the Foster prospect, a trench which had been dug probably some twenty years before, mineral samples were examined. These samples were highly oxidized and consisted entirely of limonite. Some of the samples had voids in them while other were solid and had a layer like appearance.

Found with both prospects were samples of limestone coated with limonite as well as red colored silicified limestone.

Samples from this Prospect had been sent to Art Glover, Assayer-in-charge of the College Assay Office, Department of Mines. He reported that, "the lead content in this would indicate that the material is derived from the weathering of a lead-bearing sulfide ore body." From all the samples studied the evidence would seem to indicate that this deposit is a true gossan somewhat different from

the normal gossan because of the perma-frost conditions in the area.

DEVELOPMENT

Bulldozer work done three years prior to the visit uncovered a mineralized zone 20 feet by 40 feet. This open-cut has now filled with side, seen in Figure 1, preventing inspection of the ore in place. Considerable material was recovered from the bulldozing operation and this material has been stockpiled near the prospect. It is estimated that between 10 and 15 tons of ore are stockpiled. A portion of this stockpile can be seen in Figure 7.

A float survey in the network of gulches to the north of the prospect does not indicate extension of the deposit; however, considerable galena and limonite have been found to the south of the prospect and claims have been staked as shown in Plate 2 where this float has found to be extensive.

The Bureau of Mines has drilled according to report, some four holes in the vicinity of the prospect. They have a fair amount of material and supplies in the area and plan to continue their work in the future. The results of there work during the 1953 season is not known.

RECOMMENDATIONS

As considerable gossan is found throughout the area, it is recommended that a more intensive float survey be made and that in localities where the gossa is abundant, that the diamond drilling program of the Bureau of Mine be continued to determine the extent and characteristics of the deposit.

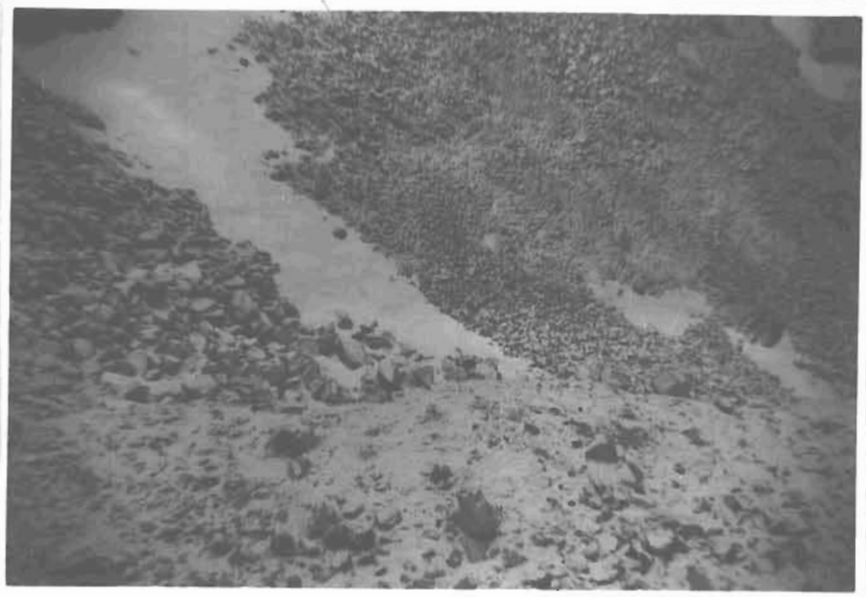

Figure 1. View into bulldozer excavation on the Foster Lead-Silver Prospect showing how slide covers outcrop.

Figure 2. View down Dry Creek from Foster Prospect facing in a Westerly direction.

Figure 3. View up Dry Creek from point above prospect. Creek is running in a Northwesterly direction and heads in cirque.

Figure 4. Looking down on prospect showing bulldozer benches as cut in 1951.

Figure 5. View of slide-filled prospect cut. D. A. Jones in center of view.

Figure 6. View facing Southeast toward head of Dry Creek from campsite below prospect.

Figure 7. View showing from 10 to 15 tons of ore stockpiled at the campsite.

Figure 8. View of excavation work from a point on the east side of the bulldozer cut.