5.0,13.6 146°25-W 60°46"N TERRITORY OF ALASKA

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## DEPARTMENT OF MINES

BOX 1391 JUNEAU. AŁASKA

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PROPERTY EXAMINATION REPORT

on

THE FIDALGO-ALASKA COPPER PROPERTY,
PRINCE WILLIAM SOUND

by

James A. Williams

A brief inspection was made of the old Fidalgo-Alaska Copper Company property and the exploration program of the Alaska Copper Corp. being carried out there on June 17 and 18, 1952. The writer was accompanied by C. L. Sainsbury, U. S. Geological Survey.

The property is also known as the Schlosser property from the name of the original discoverer. The location is on the south side of Port Fidalgo, an arm of Prince William Sound, just east of Irish Cove as shown on Plate I. It is in the Cordova Quadrangle and the Valdez Recording Precinct. The geographical coordinates are  $146^{\circ}25^{\circ}$  west longitude and  $60^{\circ}16^{\circ}2^{\circ}$  north latitude. Cordova lies 28 airline miles to the southeast.

The property was one of the better early copper producers of the Prince William Sound mining district. Production was from the upper levels, Wos. 1, 2, 3, and 4, as shown on Plate II. A cursory examination of these levels revealed that the ore bodies appear where the wallrock is massive, and where the slate is fractured and mashed, the mineralization is sparse. Aside from this, no control was immediately evident. Massive pyrite and marcasite lenses show up often, sometimes in the soft material in gouge zones. The ground is well broken up by movements, but wallrock is often solid and vertical. Stopes and working places, timbering, etc., has stood up well, but there is also some bad ground. The pipe and rails are in fair shape, and on the lower level, the drillers were using some of the original airline. All levels and dumps were tested for radioactivity with a Detectron DG-2 counter, but results were negative.

There appears to be two shear zones within the area of mineralization, either one of which, or both, might be the ore control. Geologists seem to favor the NS shear, but the possibility of the parallel EW faults which show on the hilltop, (see Figure 1) and cut across the upper portals should not be overlooked. Other prospects along these faults show mineralization in the form of covellite and bornite as well as chalcopyrite.

Buildings and structures at the property are in ruins. Figures 1 and 2 show the building at the upper end of the former tram line at one of the upper levels. Figure 3 is a closeup of the bunker at the beach, and Figure 4 is a distant shot of the same thing, also showing some of the country. Figure 5 is the cabin at the beach in which the present drilling crew lived, but this would need repairs or replacement for a permanent dwelling.

The exploration project being carried out there by the Alaska Copper Corp. was a small diamond-drilling program with one drill and a crew of two plus a cook. The company manager, Charles Herbert of Seattle, was there only a small part of the time. Louis Anderson of Juneau was the driller. The project was financed by a DMEA participating loan with the government putting up 50% of the money.

Before Fidalgo-Alaska Company quit mining, they drove a long exploratory drift, No. 9 Level, at an elevation of 500 feet below the No. 1 Level, hoping to intersect the ore at that low level. Though they drove directly beneath the upper stopes, (see Plate II), they failed to find mineralization. Level No. 9 is quite "hungry". A geophysical survey using resistivity and self-potential methods was subsequently run by Schlumberger, noted geophysicist, which was reported to indicate an ore zone located a short distance to the south of No. 9 Level as shown on Plate II. This was the basis of the present exploration. The program was to drill a number of flat holes from the 9 Level into the projected ore zone and determine its value. The project failed. No ore was found. The only mineralization found at the time of the visit was some very fine pyrite in one of the cores. Two or three more holes were drilled afterward, including two at \$300, it is reported.

Equipment used was all new and in good condition. The compressor was a Joy 210 with a 57 HP Caterpillar Diesel engine. The drill was a Joy H 515 standard blast and core drill, 7/8" core EX rod, 500-foot capacity, with an air-driven piston rod-puller. A two-drum Skagit hoist with a Wisconsin motor was used for moving the equipment up to the portal. Figures 6 and 7 are views of the compressor and the portal of No. 9 Level, respectively.

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Figure 1. Aerial Tram Building at upper levels. Note parallel eastwest faults in distant hill.



Figure 2. Another view of tram building at upper levels.



Figure 3. Remains of ore bunker at beach.



Figure 4. Distant picture of ore bunker and showing some of the country.



Figure 5. Only habitable (?) building at property.



Figure 6. Compressor used by Alaska Copper Corp. at portal of No. 9 Level.



Figure 7. No. 9 Level Portal.

Plate I