STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES
DIVISION of MINES and MINERALS

PE 58-15

REPORT ON THE EXAMINATION OF THE BUSTY BELLE MINING CLAIMS

FAIRBANKS QUAD

ALASKA

Ву

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March 27, 1968

Report on the Busty Belle Mining Claims Fairbanks, Alaska

58/335

BY
Theodore Vance and Rod Asher
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Scope of Report

The writers conducted an examination of the Cottonwood claims owned by the Busty Belle Mining Company at the request of Mr. Mel Anderson, a stockholder in the company. The examination was confined to the only adit on the property as all surface exposures were concealed by snow. Because of limited time (one afternoon) a visual investigation was performed and no mapping was attempted.

Location

The Cottonwood group of claims are located in the Livengood Quadrangle, one mile east of the Elliot Highway at approximately Range 1 East, Township 2 North, Fairbanks meridian. They may be reached by a mine road which joins the Elliot Highway two miles from the village of Fox.

Geology, Structure, Etc.

Figure 1 is a sketch map of the only adit on the property. The country rock exposed in the crosscuts is a dark fine-to-medium grained diorite that has been extensively fractured with subsequent deposition of numerous calcite and quartz veinlets. These small veins vary from $\frac{1}{2}$ " to $\frac{1}{2}$ " in width and appear to be barren of sulphide mineralization. No apparent alteration of the diorite was noted in any part of the crosscuts or drift.

Faulting is present but is not excessive. Gouge with abundant slickensides was observed in a fault in the face of the drift. This fault appears to cut across the vein but not enough development work has been performed, to show the amount of displacement.

Vein Deposits

The vein strikes N85W and dips steeply to the south. Vein width at the face is 18 inches and pinches to a mere crack on the west end. The minerals present are chalcopyrite, galena, marmatite, gold and silver; with abundant pyrite (approximately 60%), calcite and quartz. The vein is well defined at both the hanging wall and footwall; it appears to be of the fissure type. No alteration of the country rock was observed adjacent to the vein or in any other part of the workings.

Conclusions

Due to the heavy snow cover no examination of outcrops could be done, consequently, a prediction of strike length of the vein underground is impossible at the present time. The writers advised Mr. Anderson to continue drifting on the vein and to cut representative channel samples at frequent intervals.

Assay values from grab sample taken on vein:

<u>Au</u> <u>Ag</u> <u>Cu</u> <u>Pb</u> <u>Zn</u> 0.17 oz. 23.16oz. 0.01% 10% 2.5%

I O I V BUSTY BELLE

201 1 8000

DIOPITE

FAULT

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