Zone of small fractures >

Breccia zone in dike contains

## **EXPLANATION**



Greiseri or greiseritzed rhyotite dike rock Hard, gray to white; contains abundant sulfide minerals and fluorite and lesser amounts of cassiterite and wolframite



Kaolinized greisen or greisenized rhyolite dike rock
Soft, gray, green to purple. Pseudoporphyritic texture caused by
kaolinite patches. Some facies contain high percentage of pink
mica and fluorite; unit generally contains sulfide minerals, cassiterite, and minor amounts of wolframite

fluoritized tactite, unbrecciated

Very coarsely crystalline

½ in. Zinnwaldite, cassiterite



Clay derived from greisen or greisenized rhyolite dike rock Iron sulfide minerals mostly leached, but locally unit contains arsenopyrite, ferroan sphalerite, cassiterite, wolframite, fluorite, and specks of limonite



## Marmarized limestone

Cut by many thin veinlets containing one or more of following: fluorite, sulfide minerals, silicate minerals, carbonate minerals, cassiterite, and wolframite. Large dots indicate noticeable coarsely crystalline carbonate minerals



Intensely fluoritized tactite or limestone
Generally brown to purple. Spacing of x's denotes relative amount
of fluorite; dashes indicate shearing



Coarsely crystalline dark carbonate containing some manganese



Limestone breccia

Origin unknown. x's indicate noticeable fluorite



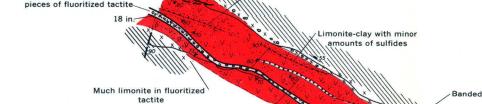
Fault breccia and gouge showing dip



Sheared and gougy rhyolite dike rock with local breccia

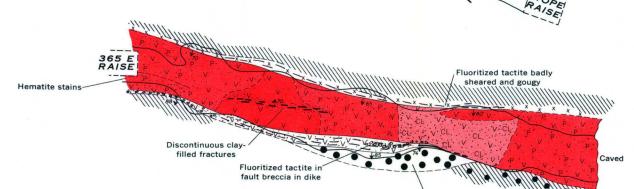


Clay alteration
Spacing of dots indicates degree

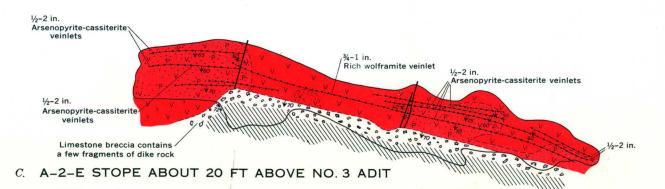


A. B-1 STOPE ABOUT 60 FT ABOVE NO. 1 ADIT

Zone of closely spaced veinlets with abundant sulfides



B. A-3-E STOPE ABOUT 125 FT ABOVE NO. 3 ADIT



O<sup>®</sup>

D. ASSAY MAP A-2-E STOPE

Base maps from tape and Brunton compass surveys.  $A,\,B$  by C. L. Sainsbury; C, by J. R. Houston

GEOLOGIC MAP OF STOPES, LOST RIVER MINE, ALASKA

40 FEET

Contact, showing dip

Fault, showing dip

Dashed where inferred or where consists of discontinuous parallel shears

Vertical fault

Strike and dip of joints

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Zone of closely spaced veinlets containing sulfide minerals

Arsenopyrite-cassiterite veinlets

Veinlet

Showing dip, average thickness, and major constituents as determined megascopically, and strike of vertical veinlet

1.0 0.19 10.5 ft

Channel sample

Sn content in percent, followed by WO<sub>3</sub> content in percent (above bar); sample width in feet (below bar). Samples by J. R. Houston. Assays by Paul Hwang, U. S. Tin Corp.

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Geology of A, B by C. L. Sainsbury, 1955; Geology of C by J. R. Houston, 1953