

1900 0005

## FREIBERG TUNGSTEN PROSPECT

PROPERTY NAME: Sample location 1767

OTHER NAMES:

MINERAL COMMODITY(IES): W, Mo?

TYPE OF DEPOSIT: Contact metasomatic (tactite)

ACCESSIBILITY:

OWNERSHIP:

PRODUCTION: None recorded

HISTORY:

County: Lincoln

Mining District: Freiberg

AMS Sheet: Caliente

Quad Sheet: Caliente 2° Sheet

Sec. <sup>07</sup> unsurv., T 1N, R 57E

Coordinate (UTM):

North 4201850 m

East 0622400 m

Zone 11

DEVELOPMENT: Old underground workings consist of one S75E -trending adit, mostly caved, but track & small dump still remain, & one well-timbered, 30' deep, vertical shaft located about 25-30' NE of adit. Shallow trenching & possibly drill roads(?) surround workings & extend to ~~XXXXXXXXXXXXXXXXXXXX~~ south & east along contact zone. Trenching probably 5-10 years old.

Activity at time of examination: None at present. Bulldozer work is older than that observed for Ag exploration on east side of range.

## GEOLOGY:

Workings (both old & new) are in bedded carbonates of the Ordovician Pogonip Group which lie adjacent to the north-east edge of a "heterogeneous & basic" Tertiary stock. The stock is the larger of two stocks which occupy the north end of the Worthington Mtns. It intrudes both Ordovician & Devonian carbonate rocks & has formed tactites along its margin. However, this is the only existing W mine in the area.

Adit follows N70W, 75N(E) fracture(fault?) zone cutting light-green, epidote-calcite-diopside-quartz tactite. Fracture one is about 3' in width. The bedding of the tactite is disrupted but generally dips to the SW or S. Overlying the tactite is a dense, finely crystalline, epidotized, red-brown hornfels. The contrasting rock types indicate a lithology change in metamorphosed host; ie more limey units formed tactite & more shaley units formed hornfels.

The shaft also explores (approximate) E-W fracture zone. Steeply inclined fracture surfaces in the tactite are coated by massive to crystalline epidote. Fracturing of the carbonates adjacent to the intrusive obviously provided avenue for mineralizing fluids.

Tactite collected from the dump is epidote-rich, dense & contains coarse crystals & pods of white calcite. Calcite coats fracture surfaces & the rock contains only very minor Feoxs. When lamped, the sample showed coarse scattered flakes of scheelite & powellite, some crystals intergrown or gradational. Wolframite(?) reported\*but none observed.

REMARKS: Sample 1767

REFERENCES: \*NBMG Bull 73. ; STAGER, H.K., W MANUSCRIPT

EXAMINER: Bentz/Smith

DATE VISITED: 10/2/83