U. S. GEOL. SURVEY

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U. S. Geological Survey, Reno, Nevada August 7, 1943

MEMORANDUL

on the

HILLTOP TUNGSTEN PROPERTY, PERSHING COUNTY, NEVADA

by Charles W. Chesterman

#### ABSTRACT

The Hilltop tungsten property is near the central part of the lava Beds, Persking County, Nevada. The property, consisting of 5 unpatented mining claims, is held by John N. Garrett of Gerlach, Nevada and E. K. Corbet of Mawthorne, Nevada, Mr. V. J. Dow of Sparks, Nevada has recently leased the property and plans to explore the northern tactite zone as well as to drift westward under the tactite zone at the 35 foot shaft. Twenty tone of ore were shipped to the Toulon Mill. The ore was milled and the mill returns averaged about 0.5% of NO<sub>3</sub>. A fair tomage of ore which might average between 0.5% and 0.75% of NO<sub>3</sub> may be produced from that area around the shaft. The tactite zone at the north edge of the property might also produce a small tonnage of tungsten ore. However, not enough exploration has been done to warrant an estimate as to the probable tonnage and grade of ore which might be expected in the northern tactite zone.

# LWTRODUCT LAN

The writer and M.R.Klepper accompanied by Mr. Carrett visited the property during the early part of July 1943. A geological sketch map of the area around the mine workings was made using as a base a compass-pace survey. The surface workings were examined with the ultra-violet lamp at night. The property is not mentioned by Hess and Larsen in U.S.C.S. Bulletin Mo. 726 or by W. C. Smith in his field notes of 1940.

#### LOCATION

The Hill top tungsten property is near the summit of a small hill in the central part of the Lava Beds, Fershing County, Nevada about 25 miles southeast of Trago, a small section station on the Western Facific Railroad.

The road which leads from Trego to the property is narrow and ungraded. About 18 miles southeast of Trego the road joins another road which leads to Habbithole.

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# OWNERSHIP

The property comprises 5 unpatented mining claims owned by John W. Garrett, of Gerlach, Nevada and E. H. Corbet of Hawthorne, Nevada. Prior to August 1945 the property was in lease to Mr. J. Hobson of Reno. Nevada.

During August 1943 Mr. V. J. Dow of Sparks, Nevada leased the property; he intends to explore the northern tactite zone and to continue the adit in the southern tactite zone beneath the shaft/

### **FRODUCTION**

During February 1942, 20 tons of ore from the shaft and adjoining open out were custom milled at Toulon with a recovery of 0.5% of 203.

# MINE RECIPMENT AND WORKINGS

Workings on the Hilltop tungsten property include an adit with two short crosscuts, a prominent open cut, a 35 foot inclined shaft, several pits and trenches, and several short shallow cuts.

The mining equipment consists of one gasoline-driven single-stage air compressor, one jack hummer, an assorment of drill steel with detachable bits, one ore car, air and water line, and a meagerly equipped blacksmith shop.

#### GEO LOCK

The area including the property is underlain principally by monzonite which seems to have completely au rounded several bodies of meta-morphic rocks made up of slate, semist, and tactite. The monzonite-metamorphic contact where observed was steep. The depth to which tactite continues is unknown, but probably shallow.

The strike of the metamorphic rocks is in general N. 70° N. and the dip
is northwest at angles of 52° to 74°.

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Two separate tactite zones have been explored on this property. The better explored southern zone, is exposed in the adit, in several trenches, and in the shaft. The northern tactite zone has been exposed by only one cut.

Both tactite zones lie parallel to the bedding of the elate and schist. The tactite is composed of dark silicates such as garnet and epidots.

The southern tactite zone, exposed by a shaft and adit, is broken into two parts by a body of monzonite. This zone is about 17 feet wide at the shaft and about 18 feet wide at the portal of the adit where it includes narrow bands of schist. The northern tactite zone, a bout 4-1/2 feet wide, is bounded on the south by monzonite and on the north by a biotite schist. The length of this zone is unknown, but is probably short, for croppings of monzonite occur along the

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strike of the zone within 50 feet in either direction from the cut.

## RESERVES

Ore reserves at the Hilltop property are 600 to 1000 tons averaging 0.5 to 0.75% of Wo3. Of this reserve, 160 tons are measurable, broken ore, and the remainder is inferred ore.

Broken ore. Ore smounting to 150 tons has been mixed from the first crosscut in the adit. Of this ere, 50 tons average about 1.0% of Wo, and the remaining 130 tons average about 0.5% of Wo. At the shaft, on the dump, are 10 tons of 0.75% ore.

Inferred ore. In the adit between the crosscut and the surface are 150 tons of inferred ore with a grade of 0.5% of  $30_Z$ . In the shaft and adjoining open cut are 350 tons of inferred ore with a grade of 0.75% of  $30_Z$ .

The north tactite zone is too little developed to warrant any estimate of tennage. It is limited to 100 feet or less in length, and is probably out off by monzoulte at shallow depth.