3070 0069

282
Item 70

Memorandum on the

RED HAWK TUNGSTEN PROPERTY

Pershing County, Nevada

by
M. R. Klepper
January 11, 1943

Location

On January 10, 1943 I visited the Red Hawk tungsten property in the Eugene Mountains of Pershing County, Nevada. The property consists of 10 mining claims, mostly in the NW quarter of sec. 15, T. 34 N., R. 34 E., Mount Diablo base and meridian. The mine is on the east side of the mountain, 100' below the crest of the divide between Pole Creek and Mill Creek.

The property may be reached from the Federal Housing settlement at Tungsten (the Nevada-Massachusetts Co. camp, 8 miles northwest of Mill City) by driving 1.1 miles east along the dirt road following the water line to the camp. At the junction here turn north on the road following the contour of the fan, and continue for 1.1 miles; then turn west on a dirt road leading into Pole Canyon. This road is passable for 3.6 miles, and a roadbed has been laid out for 0.4 of a mile farther. The last 0.2 of a mile of this road bed are shown on the accompanying sketch map.

CONFIDENTIAL
U.S. GEOL. SURVEY
FOR USE OF U.S. GOVERNMENT ONLY

In order to make the mine accessible to trucks, about one mile of road would have to be built, and the last two miles of the Canyon road should be graveled.

Ownership and History

In 1917 the claims were owned by Messrs. Nagle and Campbell of Winnemucca, Nevada. They drove a 40' cross cut, and at the end of this cross cut, drifted for 35' along a steeply dipping 4' ore bed, and sunk a 20' winze on it. One car of ore from these workings was shipped to a tungsten

mill at Toulon, Nevada; it is reported to have milled 2½% WO_3. About 40 tons of ore of the same grade is still stockpiled at the mine.

The original owners did no further work on the property, and in 1928 it was relocated by Hugh G. Murphy and Harry Brechtel of Winnemucca. Later F. R. O'Leary was was given a 10% interest.*

In July 1942 Mr. Leverett Davis, an official in the Callahan Zinc-Lead Co., took an option on the property in his own name. During the summer he employed a few men to improve the Pole Canyon road. Since then he has attempted to prevail upon the Pershing County Commissioners to complete the road to the mine.

Mr. H. F. Cavallier, an employee of the Nevada-Massachusetts Co. and Mr. Davis' representative in this area, states that they intend to build houses and do other work preliminary to mining during the next few months.

No work has been done in the mine since 1917, and there is no equipment on the property.

U.S. GEOL. SURVEY CONFIDENTIAL FOR USE OF U.S. GOVERNMENT ONLY

Production

The carload of ore milled in 1917 has been the only production from the property.

Geology

At the time of my examination Pole Canyon, the tributary canyon flowing south, and the north slope of the mine hill were covered with snow. The geology sketched on the accompanying map is therefore incomplete. The south slope of the mine hill is underlain by a westward dipping sequence

* Mr. Murphy is employed by the Nevada-Massachusetts Co.; Mr. O'Leary is the Humboldt County Surveyor.

of shale, argillaceous and calcareous shale, and fine-grained quartzite. An aplite sill intrudes the beds below the mine. Areas in which the ore body crops out are covered with snow.

Scheelite Deposits

The ore body in the drifts is about 4' wide. The ore is a medium-grained crystalline aggregate of pale brown garnet, green epidote, quartz, a gray mineral- probably pyroxene, scheelite (1-2%), and sphalerite (2%). It is probably a metamorphosed limestone bed.

Mr. Cavallier states that ledges of the same appearance and grade, and about 8' wide, crop out along the projected strike of the bed in Pole Canyon and the unnamed tributary canyon shown on the sketch map. No ore crops out on the slopes between the canyons and the summit of the mine hill, but ore float has been found.

The owners and lessees are confident that the three known ledges of ore are part of one continuous ore bed, at least half a mile long. My observations were too limited to permit well founded opinions, but I believe that a continuous bed of relatively resistant tactite should be represented by more outcrops. Such a continuous ore bed would also be unusual in an area in which the only igneous rocks that crop out within a radius of 1500' of the mine are narrow aplite and andesite dikes.

Mr. Murphy states that two parallel ore beds crop out west of the main bed. If the Nevada-Massachusetts deposits, three miles distant, are a key to the structure of the district, these may be faulted segments of a single bed.

U.S. GEOL SURVEY CONFIDENTIAL FOR USE OF U.S. GOVERNMENT ONLY

Summary

The part of the property that I was able to examine does not contain enough geologic evidence to indicate its possible worth. If a more or less continuous ore bed, having the width and grade that is exposed in the drifts, extends from Pole Canyon to the tributary canyon, and beneath the mine to the elevation of the canyon outcrops, 200,000 tons of ore may exist. In my opinion it is more likely that isolated ore bodies of a few hundred or a few thousand tons ~~tons~~ occur along the strike of one or more faulted beds. After the snow has melted, more information on possible continuity of the bed may be available.

U. S. GEOL. SURVEY
CONFIDENTIAL
FOR USE OF
U. S. GOVERNMENT
ONLY

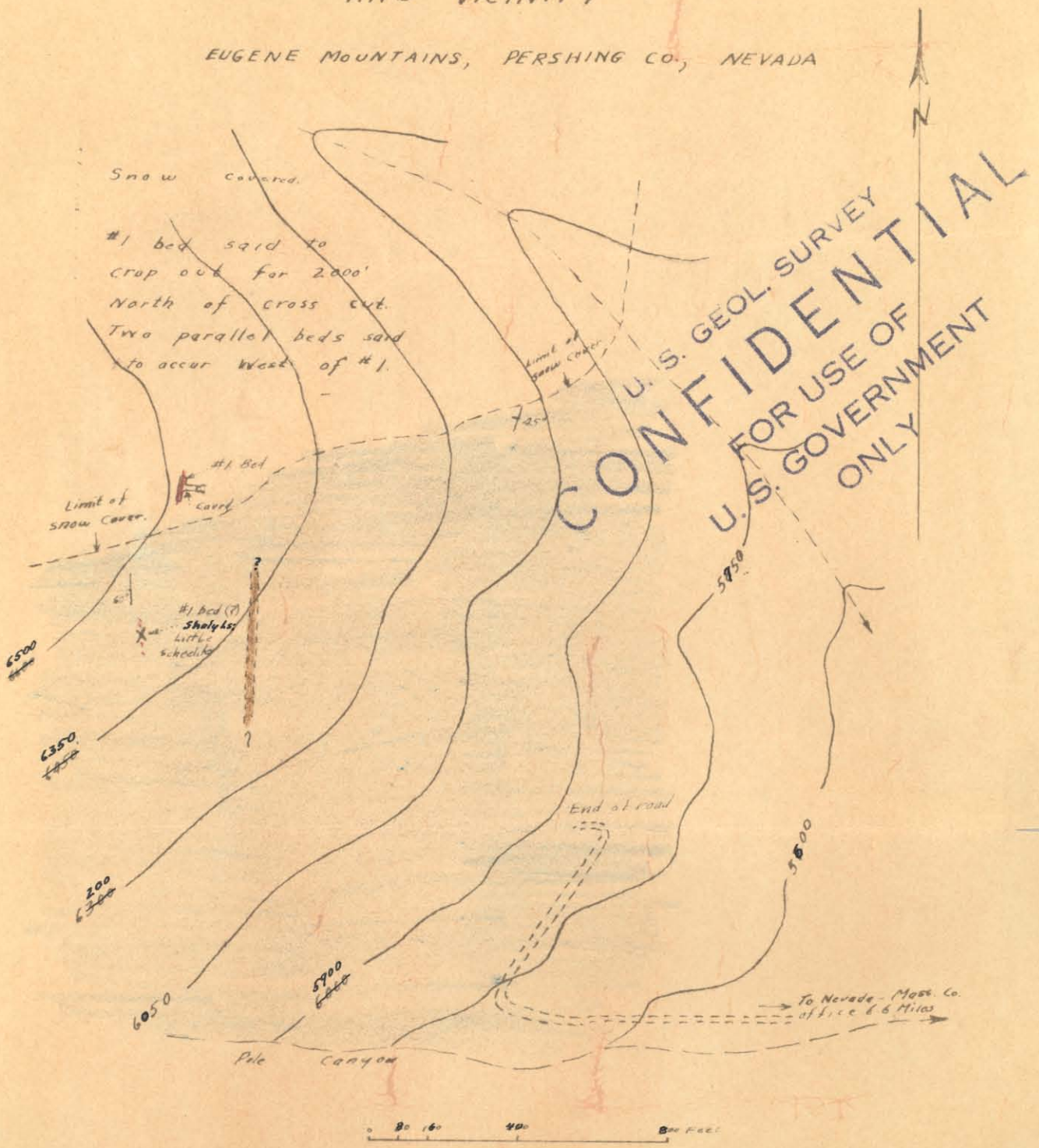
T. B. Nolan (4)
S. G. Lasky
D. M. Lemmon
File

M. R. Klepper
Assistant Geologist
Mill City, Nevada
January 11, 1943

282
Item 70

GEOLOGIC SKETCH MAP OF RED HAWK TUNGSTEN MINE AND VICINITY

EUGENE MOUNTAINS, PERSHING CO., NEVADA



Contour interval - 150' Elevations by aneroid

Aplite Shale, calcareous shale, quartzite.

Epidote-scheelite rock in tunnel Outcrop is snow covered

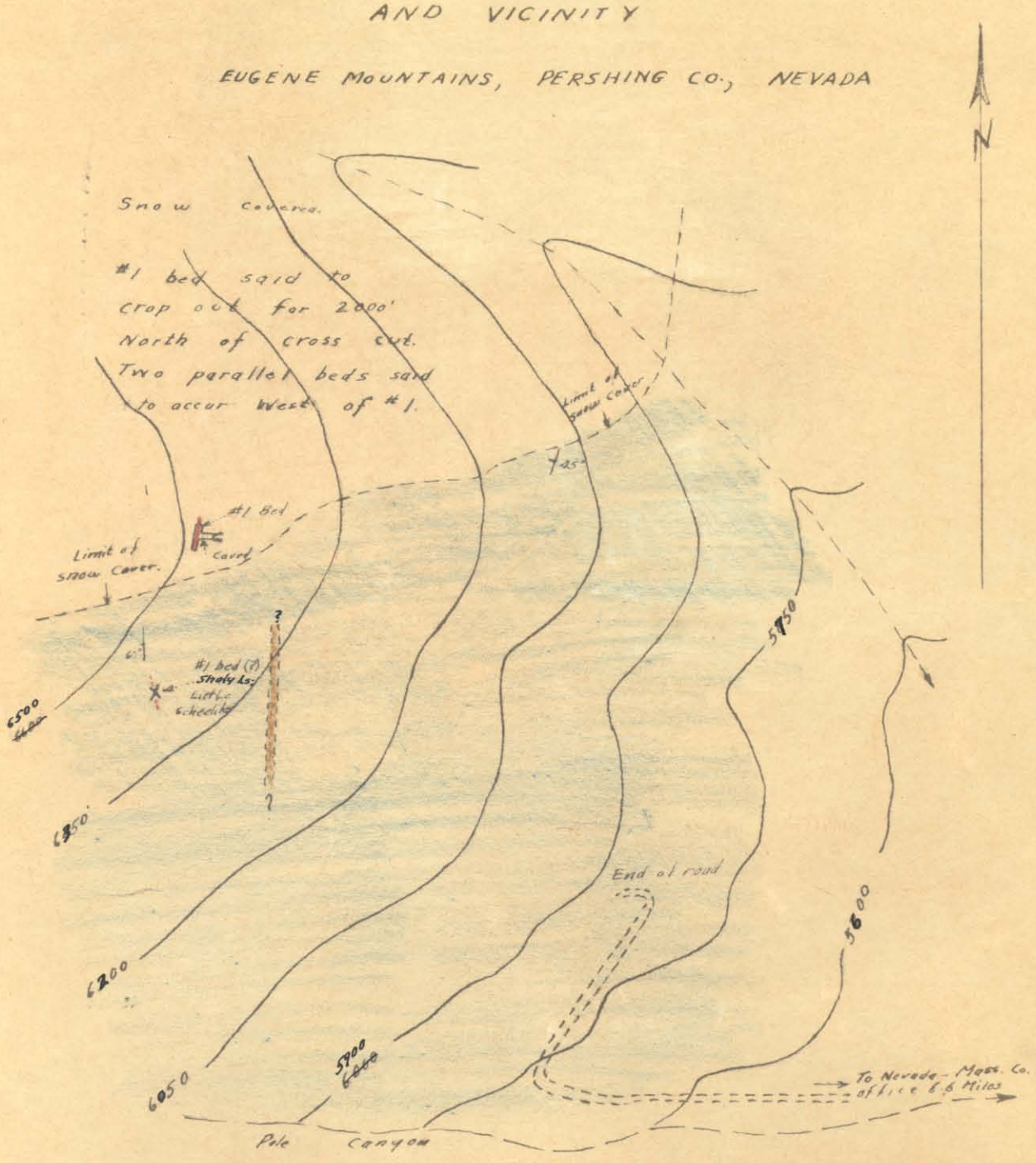
M.R. Klepper U.S. Geological Survey Jan. 10, 1943

282

Item 70

GEOLOGIC SKETCH MAP OF RED HAWK TUNGSTEN MINE AND VICINITY

EUGENE MOUNTAINS, PERSHING CO., NEVADA



Contour interval - 150' Elevations by aneroid

Aplite Shale, calcareous shale, quartzite.

Epidote-scheelite rock in tunnel. Outcrop is snow covered

M.R. Klepper U.S. Geological Survey Jan. 10, 1943