

Shoshone, Nevada
June 30, 1941

TUNGSTEN DEPOSITS IN LEXINGTON CANYON, SNAKE RANGE, NEVADA

On June 29, Donald Wyant and I visited the property of Lexington Mines Co. in Lexington Canyon, White Pine County, Nevada (see photos 200-201) 27 miles by road south of Baker. We stayed until after dark to inspect the surface by ultraviolet light.

There are at least 3 tungsten properties adjoining Lexington Canyon: the Bonanza group owned by Lexington Mines; the Loper claims; and the Kauffman claims on the Big Wash drainage.

The Lexington Mines Co. owns ~~X~~ at least 2 patented lode claims and a mill site at an elevation of about 8,000 feet. Jim Connor, a prospector who purchased the property for delinquent taxes about a year ago, now retains a fifth interest. Jim R. Barker, "make-up man for Carole Lombard and others", and F. Gallo, operator of a produce truck line from Los Angeles to Ely, are the leaders in the company, and apparently put up most of the money. Other partners at the property were J. Simoniello, (a former beauty shop operator and barber) and R. Cruce. All are from Hollywood, and are actively working at the property now.

The camp is pleasantly situated in a wooded canyon reached by a fair dirt road, passable only in summer. An adequate water supply is available by gravity flow from a spring only a few hundred feet from the camp and mill. A 50 ton mill, now under construction, will contain a crusher, rolls, and 2 tables.

This property was operated on a small scale in 1918 (?), and is reported to have produced in excess of \$20,000 worth of scheelite. The tails from the little old stamp mill are now overgrown with vegetation. The present operators plan to re-treat these tailings in the new plant

which adjoins the old one. Mr. Barker thinks that these tailings contain 0.9 % of WO_3 , but samples taken in 1940 by Reginald Brown for Tungsten Metals Corporation are reported to have averaged about 0.6 %.

The mine lies on the top of a ridge about $\frac{1}{2}$ mile by road southwest of the mill. The old time operators sank three shafts through overburden 10 to 15 feet thick, and are reported to have run drifts 300 feet northerly. These shafts now contain water 40 feet beneath the collar; so no information is available concerning the extent of underground workings or amount of ore remaining. The dumps consist of shale and platy limestone with abundant pieces and veinlets of calcite containing coarse grained scheelite. The dump material and bedrock exposures 150 yards north indicate that the orebody consisted of a number of narrow calcite veins $\frac{1}{2}$ to 6 inches wide separated by limestone. Probably 80 percent of a working face would be limestone. The general trend of the stringers exposed north of the shaft appears to be N. 65° W., parallel to the strike of the limestone beds, which dip 25° SW, but there is no assurance that this structure ~~has no correlation with the ore bodies~~ is the same or parallels that in the shafts. The 3 vertical shafts may indicate 3 ore zones, or they may indicate that the single zone dips southwestward at a low angle parallel to the bedding and was located at successively lower depths by the different shafts. Another possibility is that all three shafts may be on a vein that strikes northeasterly through their collars.

Extending several hundred feet southwestward from the shafts, the overburden consists of irregular blocks of platy limestone up to a foot in size embedded in soil and vein fragments. Large nuggets of scheelite can be found in these pieces of calcite vein, and smaller grains are disseminated through the fine dirt. This placer is 50 to 100 feet wide, and up to 15 feet deep. A 50 ton lot of this detritus was recently hauled to Glendale for testing by Nick Ehman, who screened it

to ~~remove for~~ discard the limestone blocks which made up about $\frac{1}{2}$ of the sample. The fines that constituted the other half reportedly contained about 0.75% of WO_3 . It is planned to use a power shovel to collect this surface material, which will be screened before milling the fines in the new plant.

The general geology is complicated, and only a few generalities were derived from our visit. Trees and overburden in critical areas add to the confusion. The shale and platy limestone near the orebodies ^{are} ~~is~~ probably the same as the shale and upper black limestone at Minerva. Spines and sponge spicules similar to those found at Minerva occur on the dumps. The saddle south of the mine must contain a large fault, for the massive limestone cliffs (presumably Pogonip) to the southeast strike at right angles ^{to the platy 1st.} and dip steeply northwest. This fault probably extends toward the Cedar Cabin Spring area to the southwest. A ridge of quartzite, which is probably the Eureka quartzite, overlies the "Pogonip" limestone conformably south of the Lexington camp.

Cedar Cabin Spring, surrounded by rocks of Devonian age at the head of Big Spring Creek, lies only 2 miles southwest from the Lexington mine. Inspection of aerial photos suggests that these Devonian rocks rest upon the Eureka quartzite exposed near the Lexington mine. The east slope of the Snake Range south of Lexington Creek appears to contain a good stratigraphic section from the Pogonip (near the front of the range) through the Eureka quartzite into the Devonian.

The success of the operation of the Lexington Mines Co. depends upon the amount and grade of the surface debris. The placer has not been adequately sampled, and its thickness is not sufficiently known to estimate quantity. If the fines contain $\frac{1}{2}$ percent of WO_3 , I believe that they can be mined profitably. The tonnage of old mill tailings will be small. Lack of knowledge concerning the underground workings precludes

any definite statement concerning chances for profitable operation.
The ore will doubtless require sorting.

The Loper and Kauf~~X~~man properties were not visited. They are not being worked now, and have not produced much in the past.

Dwight M. Lemmon

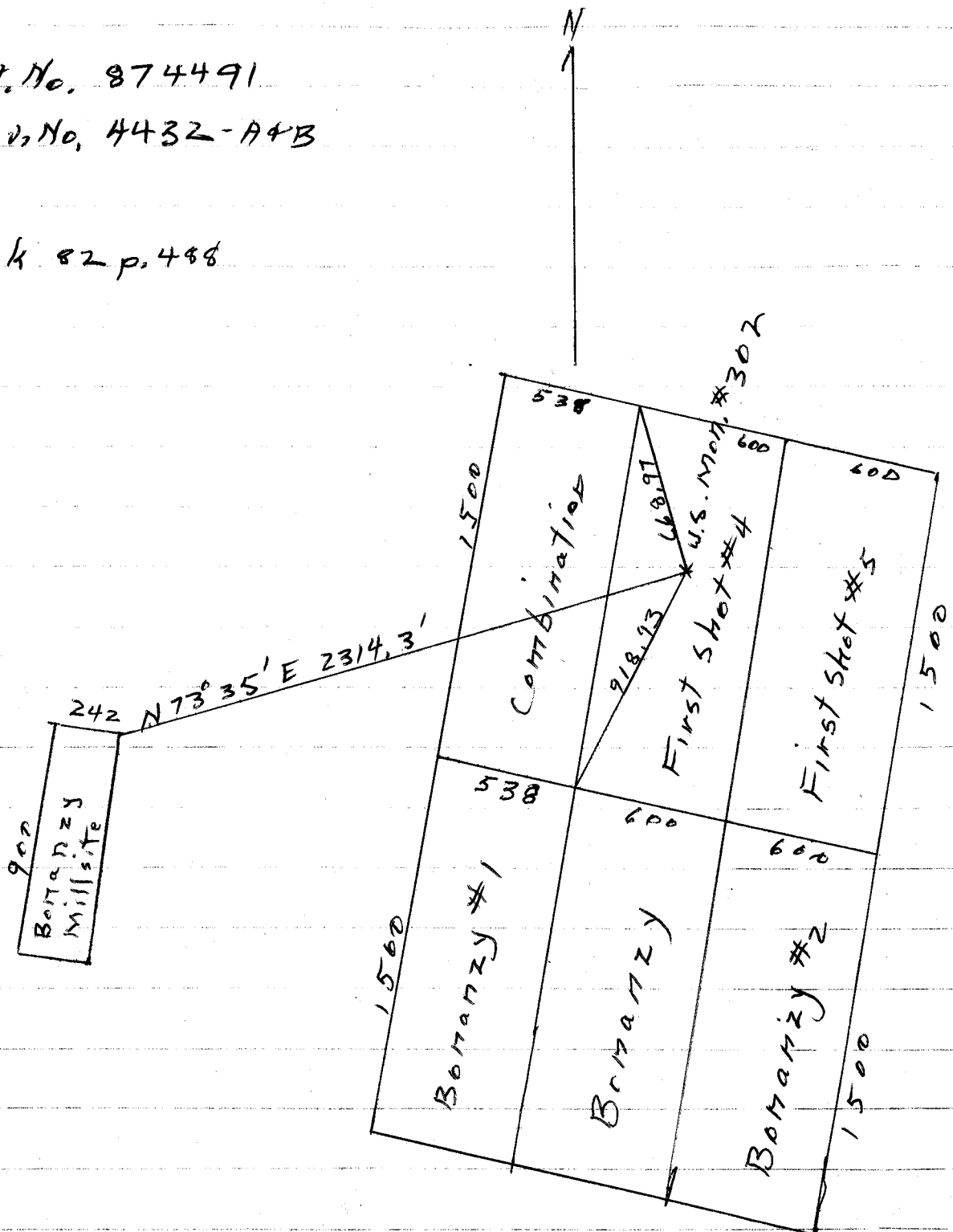
Lexington district

Pat. Claims (By Geo. T Wright, D.B.A. Lexington
Tungsten Mining Co.)

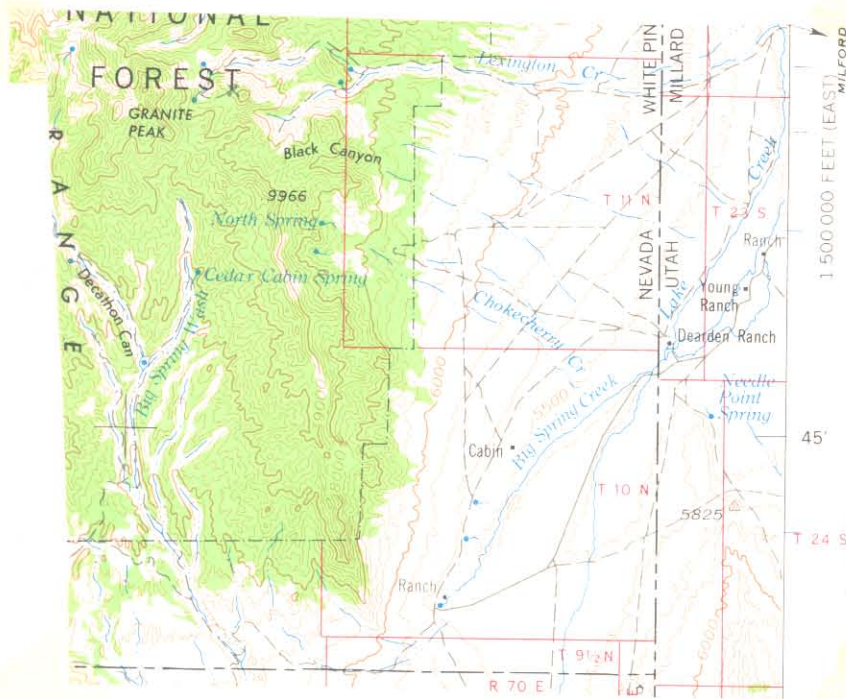
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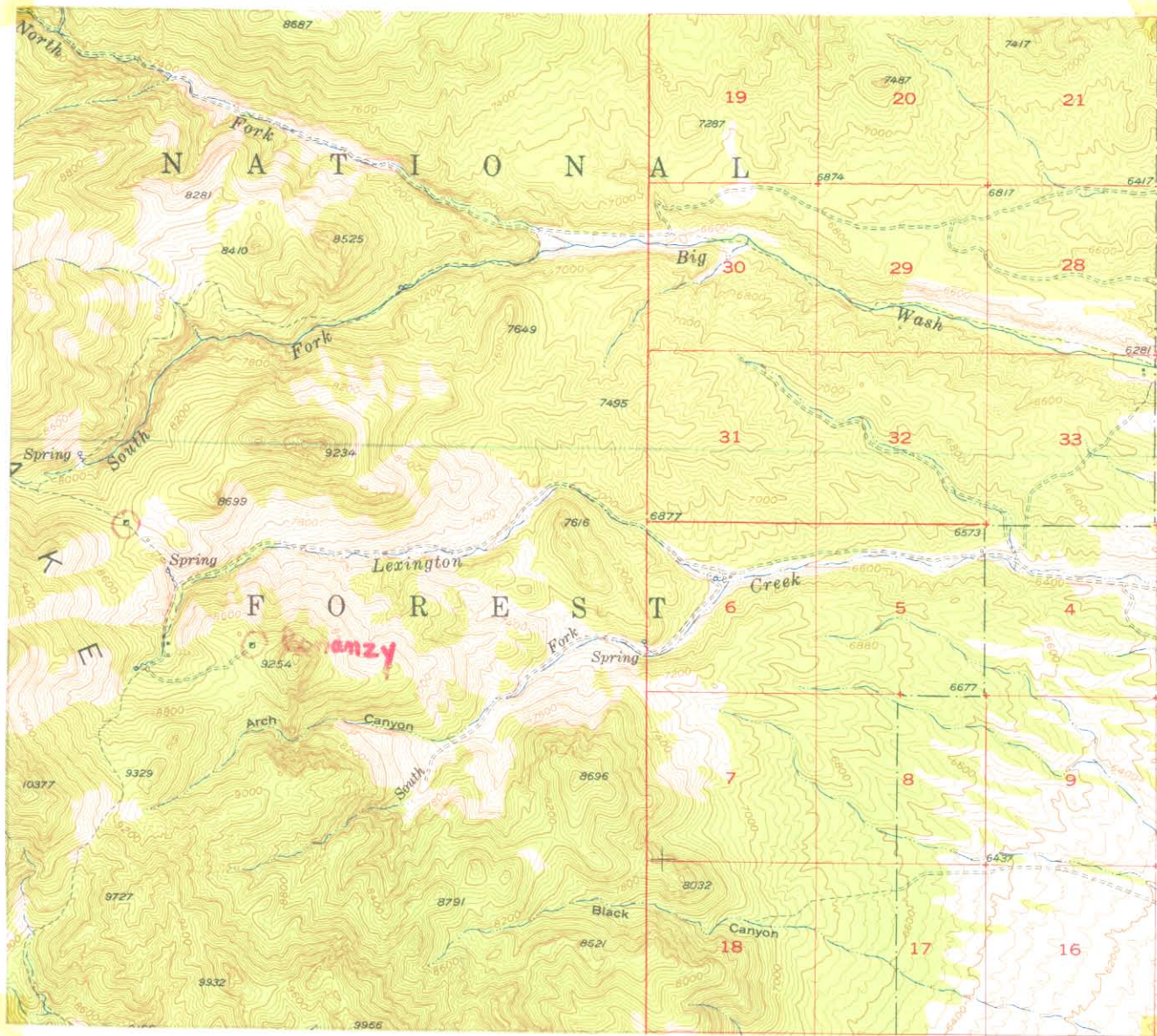
2800 0002



Lexington district

Scale 1:250,000

7600 0002



Lexington district

Garrison 15'-min. quad.
1:62,500 scale