

Greenhorn District

Grant Co

OLIVE BUTTE MINE (Big Elk Mine)

Greenhorn District
Grant County

Owner: Judge Norbourne Berkeley, 685 Court Street, Pendleton.

Location: SE $\frac{1}{2}$ of Section 35, T 9 S, R 35 E; $\frac{1}{4}$ mile N 20° to Olive Butte.

Area: 5 unpatented lode claims.

History: First located 40 years ago. Small amount of ore shipped.

Equipment: 1 new ore car, track, 2 good cabins.

Geology: Elevation approximately 6000'. $\frac{3}{4}$ mile from Olive Creek up a very steep road. Country rock is argillite; ore is a breccia composed of angular fragments of oxidized (limonitic) country rock lying in a matrix of dense, white quartz. Most of the argillite is more or less silicified. No sulphides were seen. Chert was noticed in the argillite on the ridge top above the mine. Here the bands strike N 60° E and are vertical. The attitude also varies to east-west, dipping 75° N. Assays of ore taken from dump were:

OM14

Number	Au oz./ton	Value/ton	Ag oz./ton	Value/ton
1	0.59	\$20.65	Nil	---
2	0.61	\$21.35	Nil	---
3	0.02	\$.70	Nil	---

Development: Shaft approximately 40' deep and shows some quartz on the dump. Another shaft 50' to the southwest is 20' or more deep, which also shows some ore. A caved tunnel entrance lies north 50' to the southwest. Down the hill 200' to the northwest from these workings and about 150' below a tunnel has been driven S 25° E which is caved.

Miscellaneous: Timber is abundant; water is scarce; road to mine is extremely steep. Elevation probably means that snow would interfere with all-year operation.

Remarks: Mineralization does not appear to be extensive. The vein has not been developed for any distance and may not be very wide. Unless the values appear exceptional, this does not seem to be worthy of further development; however, the property should be opened up for a more complete examination.

June 27, 1938

John Eliot Allen

John Eliot Allen
Field Geologist