

July 20, 1976

George S. Moore
465 Sheridan Street
Ashland, Oregon 97520 ✓

Dear Mr. Moore:

I have been unable to make it to Ashland in my reconnaissance of copper and zinc in Oregon. Thus, I am sending the following enclosed form for you to complete and send to:

Mr. Richard Appling, Chief
Western Field Operations Center
U. S. Bureau of Mines
E. 315 Montgomery Ave.
Spokane, Washington 99207

This will release confidential material on the Mammoth Lode to the Oregon Department of Geology and Mineral Industries. We will be happy to make copies for you if you so desire.

Thank you very much for your help.

Sincerely,

Robert E. Derkey

RED:rep
Encl: Form

1524 North Melrose Avenue
Modesto, California
September 16, 1956

Mr. W. P. Garrison
1516 I Street
Modesto, California

Dear Mr. Garrison:

Pursuant to your request that I make a brief, undetailed examination of the WALTHER property east of Medford, Oregon, this was accomplished on August 15, 1956. I herewith submit my report.

Due to the short time at my disposal it was necessary that I rely upon information gathered from other sources in matters relating to location of the property, names and positions of claims, history, and areal geology.

The economic geology of the area indicates a spotty history of successful mining for values in gold and copper. Copper mining in particular has fluctuated as a result of varying prices, and to a certain extent the costs of transportation and smelting have determined mining activity in Southern Oregon. Due to a currently high price being paid for copper, this property shows high promise. It must be realized, however, that upon such a brief look at the property it is impossible to determine to what degree that promise might ascend, particularly in view of the fact that development has not proceeded beyond the prospect stage; i.e., the ore is not blocked out.

To value mines of this kind is simply an attempt to discount the future, and is therefore almost entirely a matter of personal judgement. During my investigation I attempted to determine the strength and character of the values in sight; apparent tendency of values to pinch or swell, to become rich or impoverished, or to assume a simpler or more complex character with depth of body or horizontal extent. General geological conditions were considered, as to whether they are favorable to the deposition of quantity and value, or the reverse; and also respecting their similarity to those of successful properties elsewhere.

These points having been reviewed, it became necessary that I be influenced by my general opinion and instinctive feeling in the matter.

Contrary to certain previous reports and opinions on this property, I could find no evidence of continuous vein structure. This orebody was probably a vein parallel to structural planes of wall-rocks and subsequently pinched into lenses by pressure. This seems to be borne out

by the innumerable fractures through the ore, the presence of the schistose country rock, and the lack of distinct hanging and/or footwall. Investigation indicates the presence of lenticular or pod-shaped bodies of pyrite with chalcopyrite. The lenses, in favoring a hornblende schist, seem to lie parallel with the foliation.

In two locations in the existing developmental drifts (the south lateral and the raise) evidence of unaltered gouge was observed, and in this vicinity was found the greatest concentration of copper values. Small amounts of bornite and possibly enargite were in view, accounting for some of the higher assays reported. However, chalcopyrite remains the basic copper ore in this property, at least as far as the development has gone.

The orebody outcrops at the surface up the hill from the existing adit, showing traces of sulfide in weathered mica schist. The presence of mica at the surface followed by hornblende at a greater depth is sometimes considered to be an indication of increasing values with depth, and has been taken to be such by other observers of this property. However, it is my opinion that in bodies of this nature, nothing can be taken for granted until further development work is done.

It is felt, however, that the investment represented by exploratory drilling is well-justified in this case. With the price of copper up there is enough ore of fair grade in sight to provide a cushion for exploratory investment.

In mechanics of development, I would suggest that extensive core-drilling be undertaken to determine the location, extent and value of the lenses. In order to most efficiently conduct an operation of this sort, it is felt that an additional adit farther down the slope should be started and exploratory operations be conducted in both accesses. Any further mining should be conducted in such a manner so as to block out sections of the ore for an eventual caving-slushing mining operation with an ultimate return of at least 250 tons per day. For this reason I would also recommend that serious consideration be given to installing a 250-ton mill when development has progressed to a satisfactory stage.

In conclusion, it is my belief that this property warrants further development due to its potential for providing a comfortable return on a relatively small investment.

Very truly yours,

Frank R. Reynolds
Geological Engineer

NORTHWEST TESTING LABORATORIES
3828 N. Mississippi Avenue
Portland 12, Oregon

Materials Inspection
Physical Testing
Chemical Analysis
Feeds and Fertilizers

Ore Assay
Water
Soil
Sewage

August 28, 1956

George Earnshaw
Box 1110
Kingman, Arizona

Dear Sir:

We wish to report the following results on ore submitted
to us: Mammoth Mine

Cert. No. 32676	Sample #1	Copper (Cu).. 2.70%
No. 32677	Sample #2	Copper (Cu).. 7.43%

Respectfully submitted,

NORTHWEST TESTING LABORATORIES

Charles R. Lane