MR51-2

AN OCCURRENCE OF COPPER IN THE LARAMIE MOUNTAINS, ALBANY COUNTY, WYOMING

Location and Ownership

The deposit is located in Secs. 10, 15, & 22, T.16 N., R. 72 W. All three localities are accessible by automobile and may be reached by following the road to the University Quarry in Rogers Canyon. At this point turn southeast and follow a dirt road to the power line for the copper deposit in Section 22. The deposits in Sections 15 and 10 are approximately one and two miles, respectively, northeast of the deposit in Section 22.

The deposit located on Section 15 is owned by the Union Pacific Railroad. The deposits on Sections 10 and 22 are claimed by the U.S. Mineral Exploration Company of Laramie, Wyoming and Chicago, Illinois. Mr. Donald L. Thompson, Suite 4000, 1 N. LaSalle Street, Chicago, Illinois, is their correspondent.

Mr. Thompson and the writer spent the morning of September 6, 1951, examining the deposits in the field.

Geology and Mineralization

In all three localities, the copper mineralization is found in limestone in the Casper formation approximately several hundred feet above the Casper-granite contact.

In Section 22, the copper mineralization is found in loose subangular to angular blocks and fragments in a weathered portion of the Casper limestone. Outcrops in the immediate vicinity were examined, but none were observed to be mineralized.

The ore bodies are small and irregular and occur as replacement veins lining small fractures, and as coatings on limestone. The chief copper minerals noted were malachite and chalcocite, with an occasional occurrence of chrysocolla, brochantite and possibly some bornite. In all of the outcrops and test pits examined, the copper mineralization appears to diminish and pinch out at relatively shallow depths.

The deposits are believed to have been formed by cold meteoric solutions.

Conclusion and Recommendations

The deposit is quite similar to the other copper deposits found in the limestones near the west flank of the Laramie Mountains. These deposits and others similar to them geologically have, for the most part, been unimportant as producing mines.

In view of the sporadic distribution and diminishing mineralization at relatively shallow depths, it is felt that further development work would not reveal a copper deposit of any potential economic significance.

Signed

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Geological Survey of Wyoming
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