

NOTES ON THE WYOMING MICA & METALS CORPORATION, LANDER, WYOMING

Location

The placer deposit of the Wyoming Mica & Metals Corp. is located approximately in S $\frac{1}{2}$ Secs., 20, 21, 22, and N $\frac{1}{2}$ Secs., 27, 28, 29, T. 30 N., R. 100 W. The deposit may be reached by driving southwest from Lander along State Highway 28 until the sign marking the turnoff to Atlantic City is reached. About 100 yards northeast of this sign is an unmarked dirt road leading northwest. Follow this road for approximately two and one-half miles to the mine and mill which are located in a small valley that is drained by Rock Creek.

The deposit consists of three miles of placer claims along both sides of Rock Creek. Mr. H.M. Wade, Lander, Wyo., is general manager of the operation.

The writer spent a portion of August 3, 1953, examining the prospect and processing plant.

Geology and Mineralization

The rocks in the area are pre-Cambrian schists and granites. The placer deposits are located very near the schist-granite contact. Just southeast of the area is a zone of interlayered magnetite, mica, and chlorite schists which strikes approximately northeast and dips southeast.

Phlogopite (?) mica and native gold are the principal minerals in the deposit. In addition the operators hope to recover small quantities of magnetite, monazite, and feldspar.

The mica is found in small flakes approximately 1/16 to 1/8 inch in diameter and is very highly concentrated in the alluvial deposits in and adjacent to Rock Creek. Apparently the mica has been derived from the weathering of the mica schists.

The gold is reported to average about \$.55/yard³ with occasional spots assaying as high as \$41.00/yard³.

Beneficiation

The ore is dumped into a grizzly and then is carried by a conveyor belt to a classifier. From this point it passes through three Humphrey spirals which separates the mica from the concentrate. The remaining concentrate is passed on to two Wilfley tables from which the gold is separated. In addition the operators have a magnetic separator which, at present, is not being used in the milling circuit. This could be used for magnetite or monazite separation if necessary.

Although the Wyoming Mica and Metals Corp. was not operating their deposit during the writer's visit, they intended to produce some mica and gold before the coming winter months. They intend to produce ten tons of mica per day, but in order to do this it would probably be necessary to add about seven more Humphrey spirals to the milling circuit. The mica will probably be marketed as scrap with the gold recovery paying for the entire operation.

Signed

William H. Wilson

William H. Wilson
Ass't State Geologist
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Photographs of the operations of the Wyoming Mica & Metals Corp.

Photograph on the ^{Right}~~left~~ shows a portion of Rock Creek and the valley containing the mica and gold placer deposits. The grizzly and part of the conveyor belt can be seen on the right.

Photograph on the ^{left}~~(right)~~ shows the ~~entire~~ processing plant as seen in August, 1953.