GEOLOGICAL SURVEY OF WYOMING

1907
MR-92

Mr J.W.Boyd.
Idaho Springs, Colo.
Dear Sir:-

Complying with your request, I hand you herewith brief report on surface showings and conditions at the property held by the Sherman Copper Mining Company, near Sherman Station on the Union Pacific Railroad in Albany County, Wyoming. The legal description is given as Section 27, T.13 N., R.72 W.,
13 N., R. 71 W.

GEOLOGY.

The formation of the Laramie Hills, as the range of mountains in which the locality lies is locally known, is composed of reddish feldspit ic granite, cut by dykes of diorite, gabbro, gneiss and schists, and it is here noted that the most promising mineral showings are found on or near the contacts of these dykes and the including granites.

THE SHERMAN GROUP.

Here the formation presents the characteristics above noted and is heavily mineralized. The general trend or direction of the dykes is northerly and southerly but varies locally and in many cases the dyke prdoper is heavilly covered by surface wash at various points along the course of the dykes.

These dykes have been more or less opened up by surface cuts and shallow shafts at many points on the section. At a point east of the main shaft, there are several ledges opened up in this manner and which

show quartz ores and other vein matter heavily mineralized with oxidized iron in these surface cuts and shafts. On former occasions, the Geologist has taken samples from some of these workings and some have showed goldvalues up to two dollars ton when assayed. These are surface values only and the carrying mineral in this locality is beleived to be copper sulphides with depth.

The main workings consist of a shaft on a promising ledge, the depth being given at 1[illegible] feet, with drifts forty feet northerly and 17[illegible] feet southerly but as the shaft was filled with water at the time of examination, the conditions of these works cannot be here given.

At this sahft the following plant is installed:

1 Fairbanks-Morse [illegible]"x [illegible] steam friction hoist.
[illegible] [illegible] H.P. return tube boiler.
1 No 7 Cameron Sinking pump.
Tool and pipe equipment complete.

On a former visit to this property, this shaft was examined to a depth of about 7[illegible] feet, where about two feet of quartz ore carrying copper sulphides was noted and this is believed to be the permanent ore of this district, as evidenced by this and other workings.

At a point some 300 feet south of the shaft, a series of cuts have shown a heavily mineralized dyke of gabbro-diorite some 2[illegible] feet wide which runs east of the present shaft and is evidently the capping of copper ores at depth. The copper ores of the Strong Mine, thirty miles north of Sherman are carried in a similar dyke but are not so heavily mineralized at the surface and improve with depth.

To prospect this showing, the drift south should be extended southerly across the intervening formation at a convenient angle and

the conditions of the ores determined at this depth (12" feet) by cross cuts and drifts along the mineralized quartz vein noted on the westerly wall in the open trench above noted.

It is considered that the showings made in the shaft and in the surface cuts fully warrant the opening up of this ledge and that this is the most economical method of prospecting these showings at the present time and with the equipment at hand. Later, when the ledge has been opened up, a working shaft may be made at this point and deep work out lined as warranted by the showings then developed.

This is considered a good prospect for detellopment and to warrant the expenditure necessary to fully prove these showings.

General conditions here are favorable for mining.

Respectfully Submitted,

Henry O. Beeler.

State Geologist.

Date of Examination,

September 8th, 1907.