2940 0024

(115) Item 26

PROPERTY NAME: Blue Star Mine

OTHER NAMES: No. 8 Mine

MINERAL COMMODITY(IES): Gold, Turquoise

TYPE OF DEPOSIT: Disseminated

ACCESSIBILITY:

OWNERSHIP: Carlin Gold Mining Co., P.O. Box 979, Carlin, NV 89822

PRODUCTION HISTORY: Estimated reserves equal 1.8 million tons at an average grade of 0.12 oz/ton Au.

County: Eureka

Mining District: Lynn

AMS Sheet: Winnemucca

Quad Sheet: Rodeo Creek NE 7-1/2'

Sec. 4, T 35N, R 50E

Coordinate (UTM):

North 4 5 3 2 4 4 0 m

East 0 5 3 3 6 8 0 m

Zone +11

DEVELOPMENT: The Blue Star Mine is developed as an open pit. An upper pit is located to the NW.

ACTIVITY AT TIME OF EXAMINATION: The Blue Star Mine open pit was actively being mined at sporadic intervals. The upper pit has not been mined for several years.

GEOLOGY: The property was first developed for its abundant, good quality turquoise. Gold was discovered later and has been mined since 1959. Carlin Gold Mining Co. started pit mining operations in 1974.

This gold deposit contrasts with the main Carlin Gold Mine in several ways. Unlike the Carlin Mine, the gold mineralization at the Blue Star is in upper plate, or transitional rocks. The mineralization is structurally controlled and is accompanied by abundant copper mineralization which occurs along steep fissures and fractures. Unlike Carlin, there is not much carbon in the host rocks.

The main structural feature of the Blue Star open pit is the Blue Star thrust fault. This fault occurs in the upper plate sequence placing cherty shales, quartz sandstones and sandy siltstones above the transitional carbonate facies. This fault is separated laterally from the Roberts Mountain thrust by a high-angle, NE striking fault.

Within the pit, we observed the exposed transitional carbonate rocks. The rocks are weakly hydrothermally altered. However, steeply inclined fissures cutting through the sediments were highly altered to clays and iron oxides. Some copper minerals were noted along the steep fissures. Slicks were abundant within the pit and the bedding of the sediments was highly distorted by folding and faulting. A kaolinized, east-dipping porphyry dike was observed within the sediments in the upper levels of the pit.

In the Blue Star upper pit, located NW of the Blue Star Mine, disseminated gold mineralization occurs along a high angle fault striking N20E and the highest grade ore is located at the intersection of an older east-west striking fault and a younger northerly striking fault. Apparently the oldest fault "prepares" the rock for the mineralizing fluids which come up along the younger N-S structure. The rocks at this pit are similar to those observed in the lower pit except that there are more arenaceous varieties present, i.e. black quartzite. Some of the rocks displayed quartz veining.

REMARKS: It is interesting to note that jasperoids cap the hills above both pits.

REMARKS. Sample 131A-Limeysiltstone/shale containing veinlets and lenses of copper oxides.
Sample 131B-Oxide clay and iron gouge material from steep fractures and fissures.
Samples collected from Blue Star Mine open pit.

Photos

REFERENCES:

EXAMINER: Bentz/Brooks/MacFarlane

DATE VISITED: 5/27/82