2940 0026

(115)

PROPERTY NAME: Carlin Gold Mine

OTHER NAMES:

MINERAL COMMODITY(IES): Gold, Silver, Barite

TYPE OF DEPOSIT: Disseminated replacement

ACCESSIBILITY:

OWNERSHIP: Carlin Gold Mining Co., P. O. Box 979, Carlin, NV 89822 (A subsidiary of Newmont).

PRODUCTION: 1965-1979; 3,044,000 oz. Au from 12,088,700 tons.

HISTORY: See CRIB

County: Eureka Item 28

Mining District: Lynn

AMS Sheet: Winnemucca

Quad Sheet: Rodeo Creek NE 7-1/2

Secs. 11, 14, T 35N, R 50E

Coordinate (UTM):

~ Loc for sample

North 4 5 2 8 5 5 0 m

East 0 5 5 6 7 5 0 m

Zone +11

DEVELOPMENT: Adjoining, very large open pit mines, haul roads, drill roads, millsite and offices.

ACTIVITY AT TIME OF EXAMINATION: Open pit mining.

GEOLOGY: At the time of our examination the schedule for mining of the Carlin open pit was two eight hour shifts per day, five days a week. The average grade of ore being mined was .23 oz/ton.

The main Carlin open pit is located in the NE corner of the Lynn window near the ridge-crest of the southern Tuscarora Mtns. The pit is elongate in an E-W direction.

On our visit to the pit we examined a large cut face in black carbonaceous material within the upper Roberts Mountain Formation. The lithologies typical of this formation include sandy limestones, silty dolomites and dolomitic siltstones. The carbonaceous rock was observed at the north end of the pit. It lies along an E-W striking fault (the Hardie fault) which is truncated by N or NW striking, high-angle faults. In this part of the pit, the carbon is localized along this E-W structure.

The bulk of disseminated gold in the pit is more or less stratigraphically, or bedding controlled. This contrasts with the west pit and upper plate mines in which the ore is more or less structurally controlled.

Not much silicification was noted in the rocks we observed in the pit, but resistant red jasperoid bodies were observed in the upper pit in addition to bleached, clay altered areas which mark the zones of boiling. The jasperoids pinch out at depth and are probably the siliceous caps to hydrothermal systems which vented along steep fractures (or faults).

Highly altered igneous dikes cut the carbonaceous and other sediments at a high angle to bedding. Some of the dikes are emplaced along old faults and weakly mineralized. The Roberts Mountain Thrust was visible in the extreme upper level of the pit.

REMARKS: We sampled dark gray, carbonaceous, sandy limestone and dolomite from a pile of carbonaceous rock within the pit. The rock is coated and cut by calcite and barite veins. (Sample 130A).

Sample 130B was collected from a flagged "high-grade" pile near sample 130A. The ore rock is an oxidized silty limestone which is iron-stained and fractured, but not silicified.

Photos

Samples 130A and B

REFERENCES:

EXAMINER: Bentz/Brooks/MacFarlane

DATE VISITED: 5/27/82