0950 0004 ELKO CO. (RAIN SUBDISTRICT) A Submittal for the EMPIRE MINING PROPERTY Elko County, Nevada by Robert E. Warren GOLDEN EMPIRE MINING VENTURES Introduction The Empire Mining Property is a potential disseminated gold property located five miles south of Carlin, in the Pinon range in southwestern Elko County, Nevada. The property consists of sixty five unpatented lode claims filed in June and July of 1983. The claims are in sections 22,24, and 26; T 32 N, R 52 E. The owner of the claims is Golden Empire Mining Ventures, hereafter known as GEMV, a partnership consisting of Robert E. Warren and Robert E. Gregory. The surface rights to section 26 are owned by the Tomera ranch, whereas the mineral rights have been held by the U.S. The Empire property includes about half of a two square mile belt of hematitic hydrothermal alteration in Miss. siltstones and mudstones belonging to the Webb fm. Geochemical samples from the alteration were anomalous in mercury and some contained arsenic. Drill hole EM-1, drilled by Hecla, carried anomalous mercury from the surface down to the bottom at 645 feet. The geological similarity to the nearby Raine disseminated gold discovery, suggests that the Empire property has excellent potential for disseminated gold mineralization below the surface. GEMV intends to lease the Empire claims to a mining company having the potential to develop a large scale disseminated gold mining operation. Geology The Empire Property is located four miles west north-west of the Raine discovery, a major disseminated gold deposit held by Newmont Co., and six miles west of the Emigrant Springs disseminated gold deposit held by Homestake. (See the location map.) At both the Raine and Emigrant Springs deposits, disseminated gold occurs at the base of a thick section of

Mississippian sediments, in the Webb formation, a mudstone and siltstone unit with a maximum thickness of 800 ft. The rocks overlying the Webb are mainly conglomerates and coarse sandstones, and below the Webb is a thick section of Devonian carbonates. The Webb fm. has proved to be an excellent host rock for gold deposits, apparently because of its high permeability. The Webb fm. outcrops over much of the Empire property and is flanked by overlying Mississippian and Pennsylvanian conglomerates and sandstones.

The Empire claims contain about half of a regional hematitic-argillic-silicification alteration zone that trends northward for 2 1/2 miles and averages about 3/4 of a mile in width. This zone contains a number of hematitic jasperoid plugs of varying dimensions. It should be noted that the Raine property is similarly characterized by hematitic-argillic-silicification alteration within the Webb fm.

At the northeast edge of the northeast block of Empire claims, are several jarositic jasperoids in contrast to the hematitic jasperoids found throughout the rest of the property. These yellow-brown jasperoids may represent a deeper level of exposure or perhaps a different stage of alteration.

Geochemistry

Geochemical sample analyses from the surface indicate that mercury is somewhat anomalous throughout the hematitic alteration and strongly anomalous within a mile-long zone in section 26. (see the map of section 26). Hematitic alteration usually averages about 200 ppb except in the stronger zone of section 26, where six samples averaged 1000 ppb, with a high of 2550 ppb. Several samples from this zone were also anomalous in arsenic. (Up to 275 ppm)

One sample from the jarositic jasperoids in the northern end of claim "I5" ran 400 ppm in arsenic and also ran .005 oz/ton in gold.

Throughout the property, most samples were low in gold, however, some carried moderate arsenic.

Drill-hole EM-1

Hecla Mining Company leased the Empire property in 1984 and drilled a 645 foot hole in the north eastern claim block. The drill site was selected for convenience rather than geochemistry. The drill logs showed mainly reddish and brownish altered siltstones and mudstones down to 435 feet where shales continued to the bottom at 645 feet. The samples were generally low in arsenic, gold, and antimony but anomalous throughout in mercury, averaging about 300 ppb.

Hecla did no surface sampling and has dropped the lease on the property.

Conclusion

The Empire property has features suggesting that Raine-type disseminated gold may occur at or near the surface. the hematitic alteration is visually similar to the Raine property. Also, the alteration occurs as replacements of the Webb fm. Finally, the alteration is anomalous in mercury and locally anomalous in arsenic. A more comprehensive geochemical survey would prove invaluable in outlining future drill targets for disseminated gold mineralization.

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