

## **BETTY EAST PROJECT KNOLLS PROSPECT**

1991 Exploration

A shallow (to 100 feet depth) geologic gold resource with a nominal heap leach reserve potential of 120,000 tonnes averaging 2 g/tonne (6400 contained ounces) is trench and drill-indicated at The Knolls, part of the Betty East claim block, six miles southwest of the town of Manhattan in Nye County, Nevada. Extensions of the deposit--to a depth of at least 200 feet, and for at least 1200 feet along strike in the closely-spaced subparallel systems--are suggested by drilling and surface-indications, and an additional 600,000 tonnes (40,000 ounces) of development potential is inferred. Most importantly, the known structure, lithology and alteration through the area all are favorable toward finding a higher grade deposit of 1,000,000 or more tonnes below the shallow resource, at depths of 350 to 800 feet .

Two principle NNW trends of gold mineralization were established at this site by geochemical survey and backhoe trenching. Initial drilling—15 reverse circulation holes totaling 1235feet—established potentially mineable subsurface mineralization with intercepts ranging from 5 to 15 feet to about 60 feet in depth from surface. In an expanded follow-up program, extensions were tested along strike and at greater depth. Twenty-four holes and 4100 feet were drilled, of which 110 feet established potentially economic mineralization in intercepts of 5 to 20 feet up to 180 feet in depth, with 210 feet of associated, strongly anomalous material.

The gold occurs in metamorphosed and thrust, argillized Paleozoic limestones and shaley phyllites associated with local hydrothermal brecciation, silicification and replacement. Mineralizing solutions have been channeled by high angle faults and shears with northwest and east-northeast trends. A fine-grained, deeply-weathered dike of mafic to intermediate composition intrudes one northwest fault and is mineralized locally. Other more felsic dikes are seen discontinuously on the property in association with gold occurrences.

On the East Knoll, several sub-parallel fault zones and a series of east-west fault/shear zones, each containing low to medium grade gold values (0.7-8 g/t) dispersed over apparent widths ranging from 5 to 20 feet, collectively form a semi-continuous north-northwest trending, structurally-articulated network of mineralization about 700 feet in length, up to 130 feet or more in depth, and, locally, up to 150 feet or more in width. On the West Knoll, a similarly mineralized structural network parallels that of the East Knoll, following a dike-intruded northwest fault which has been locally displaced and sheared to the east. Mineralization again is semi-continuous by drill indications and extends over at least 400 feet to depths of about 100 feet.

Additional drill data is needed to elevate the current trench and drill-indicated resource at the Knolls to a reserve status. However, assuming an average drill intercept grade of 2 g/tonne over a mineable block averaging 1200 feet in length, 12 feet in width and 100 feet in depth (365 x 3.6 x 30.4 meters), the deposit would yield about 100,000 tonnes with 6400 contained ounces. The two mineralized zones are open at depth and extend for 600 feet or more both to the north and to the south along strike, as indicated by preliminary surface sampling and mapping, thus much greater near-surface potential awaits exploration and development.

An orebody of 1,000,000 tonnes or more could exist at depth given the siliceous character of the host rocks, the broad but fracture-controlled extent of the shallow mineralization, and evidence that these rocks have been thrust over more massive and thick-bedded impure limestone units which crop out near the base of the East Knoll, to the east.

