EXAMINATION REPORT SWALLOW MINE

YAVAPAI COUNTY, ARIZONA T.8N., R.2W., SECTIONS 6 AND 7 MORGAN BUTTE 245

R. O. White

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SUMMARY

The Swallow Mine is located approximately 15 miles northwest of Wickenburg, Arizona and is situated in the Wickenburg Mountains. The property is part of the Castle Creek mining district. Mineralization is concentrated along a series of steep northwest-trending shear zones cutting Precambrian Yavapai schist and Bradshaw granite. Gold grades range up to several ounces per ton in high-grade portions of the shears. Surface geochemical values range up to 1 ounce per ton. Gold mineralization appears to be associated with variable quartz, specularite, chrysocolla, calcite, fluorite, and barite veins. Veins are also anomalous in silver, arsenic, copper, bismuth and tungsten.

The property was examined over several days with surface samples taken along shear zones and of dumps. Samples were collected in fractured host rocks adjacent to veins. Field examination revealed that the property contains a number of shafts, tunnels and adits exposing mineralization underground. Samples were collected in the main Swallow tunnel across vein zones and in altered stockwork zones between veins. Results of this sampling are pending.

The prospect has strong open pit potential with mineralization distributed over an area of 4,000 feet in strike length by 3,000 feet in width. It is recommended that negotiations be initiated for acquisition of the Swallow Mine property.

LOCATION

The prospect is located 15 miles northwest of Wickenburg, Arizona and is situated in the northern part of the Wickenburg Mountains. It is part of the Castle Creek mining district.

Access is via the Constellation Road nine miles from Wickenburg then east on an improved dirt road for approximately five miles to the Abe Lincoln Mine. At the Abe Lincoln Mine the property can be reached by turning north and travelling for three miles on rough dirt roads to the Swallow Mine workings.

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PROPERTY

The property was submitted by Charles C. Brown of 11067 Pleasant Valley Road, Sun City, Arizona 85351, (602)974-0120. The property is held by one patented claim in the center of the area surrounded by 50 unpatented claims covering part of the six sections. Areas to the north and south of the claim block are staked and held by local owners. Section 8 southeast of the claim block is apparently a state section. Some areas north and east of the claim block may be open to staking and this is being studied. One isolated unpatented claim is located in section 7 to the south along an east-west trending mineralized zone.

EXAMINATION

The prospect was first examined on December 19, 1989. Sampling of surface exposures of the veins and workings were initiated. The surface examination revealed that there was significant open pit potential within the property claim block. Geochemical results from this initial examination were received in late January. Geochemical results generally confirmed gold values reported by the owner.

A second examination was made on February 6, 1990 with J. D. Forrester. During this examination samples were collected underground in the main Swallow tunnel across vein exposures. Samples were also collected in some of the Moonlight vein underground workings. The results from this sampling were pending at the time of this report. A total of 58 surface and underground samples have been collected to date for geochemical and petrographic analysis.

GEOLOGY

The Swallow Mine prospect is characterized by a series of northwest-trending veins dipping 60-80 degrees to the northeast. Veins on the east side dip steeply to the southwest. The veins are hosted by Precambrian Yavapai schist and Bradshaw granite. The

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veins and mineralization are of probable Tertiary age and likely related to the extensional tectonism prevalent throughout western Arizona. At least four of the vein systems have been mined locally and are described, from southwest to northeast, as the Golden Wonder, Patterson, Swallow and Moonlight vein systems. Veins are concentrated along shear zones that may be up to 100 feet in width locally. Veins are characterized by massive specular hematite seams and stockwork zones with variable chrysocolla and malachite. Earthy red hematite alteration of adjacent host rocks highlight the veins in surface exposures. Other gangue minerals associated with mineralization include quartz-amethyst, fluorite, magnetite and minor copper-iron sulfides.

Hematite, limonite and chlorite are the primary alteration products with strong argillization and silicification of areas immediately adjacent to veins. Veins are locally zoned with seams and halos of massive specularite alternating with seams of chrysocolla and malachite.

The north end of the claim block and the steep northwest-trending vein systems are cut by a late postmineral(?) low-angle fault. This is a major fault, up to 40 feet thick, with zones of gouge, breccia and mylonitization. The fault strikes east-west and dips gently (30°) to the north. There is weakly anomalous gold mineralization in veins in the upper and lower plates of this fault between major vein systems. This mineralization may represent local weak remobilization but this has not been definitively determined.

Geochemical results from samples taken of surface exposures generally confirm values provided by the owners. Gold values range from below the detection limit to as high as 1.1 ounces per ton. Approximately 50% of the samples yielded gold values above 0.5 ppm. Thirty percent of the gold values ranged from 1-9 ppm. Samples were also anomalous in silver, arsenic,

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copper, bismuth and tungsten. Petrographic results and geochemical results from samples taken underground are pending.

CONCLUSIONS AND RECOMMENDATIONS

Mineralization at the Swallow prospect is concentrated along a number of northwest-trending shear zones up to 100 feet in width. Gold values within these zones locally range over several ounces. There is some evidence of lateral dissemination on gold mineralization away from the heart of the vein system. Veins are distributed over an area of 4,000 feet in strike length by at least 3,000 feet in width. This area allows for considerable open pit potential at the Swallow prospect.

I recommend that negotiations be initiated for acquisition of the Swallow Mine property.

ROW: CC

cc: RBL

JDF