GOLDEN ARROW DISTRICT

LOCATION

The Golden Arrow mining district is located on the western side of the northen Kawich Range about 40 miles southeast of Tonopah. The district covers the lower flanks of the range along the edge of Cactus Flat and includes the old camp of Golden Arrow as well as Blake's Camp three miles to the northwest. The mines of the district are located in Sections 27, 28, 29, 32, and 33, Township 2 North, Range 48 East and in Sections 3, 10, and 11, Township 1 North, Range 48 East, Nye County. This district is only 5 miles north of the northern boundary of Nellis Air Force Range.

HISTORY

Discoveries in this district were made at two separate locations within a period of about eight months. A small ledge of rich gold ore was discovered at the original site of Golden Arrow in October 1904 (Paher, 1970). This discovery would have been at one of the properties in the southeast part of the district, in Township 1 North, Range 48 East. In June 1905, gold was discovered in veins at Blake's Camp, located about 3 miles to the northwest of the original Golden Arrow discoveries (Ball, 1907). Somehow, in the years since the first activity in the camp, the name Golden Arrow has been transferred north to the site of mines at the foot of Confidence Mountain, northeast of Blake's Camp.

Most of the work in this district was done prior to 1916, although small shipments of ore from the district are recorded for 1941 and 1946-50 (Cornwall, 1972). Total estimated production is about $4200 (Kral, 1951).

There has been considerable activity at Golden Arrow in the past few years. Drilling and trenching around Dead Horse Hill (Blake's Camp) appears to have been done recently. About a mile and one half south of the present site of Golden Arrow, a large open-pit mine was developed and then apparently abandoned. Ore from this mine was transported a few hundred feet down slope to the northwest of the pit and placed on leach pads. There is no evidence that the leach operation ever operated and it was not active in May 1986.

Evidence of recent drilling was also noted in the area of the Jeep claims, at the original site of Golden Arrow.

GEOLOGIC SETTING

All of the Golden Arrow district is underlain by Tertiary volcanic rocks. Most of the rocks are rhyolitic welded ash-flow tuffs and tuff breccias (Tuff of Kawich caldera, Gardner and others, 1980). Near the site of Blake's Camp, these rocks are overlain by the Andesite of Golden Arrow (Gardner and others, 1980). The Kawich caldera lies in the northern Kawich Range ot the northeast of Golden Arrow; the district is outside the western margin of the caldera. The Page fault, a major ore control for the mines at Blake's Camp (Ferguson, 1916) is roughly parallel to the caldera margin and, although about 3 miles apart, the two may be structurally related.

ORE DEPOSITS

At what is presumed to be the site of the 1904 Golden Arrow discovery, the present Jeep Group area in Section 3, Township 2 North, Range 48 East, three inclines expose a northwest-striking quartz stringer zone in altered rhyolite. Pyrite and wispy streaks of gray sulfides occur in the quartz.

Workings in Sections 32 and 33, Townhsip 2 North, Range 48 East (the Golden Arrow Mine of Ferguson, 1916), follow the northeast-trending Page fault (Ferguson, 1916). A series of ten or more shafts were sunk along the fault to explore mineralized zones formed along it. Vein mineralization described by Ferguson (1916) occurred in rhyolite and consisted of small quartz-filled fissures carrying a few specks of sulfides. The wall rock close to the fissures is silicified. Pyrite is the principal sulfide present. Lamellar quartz-after-calcite was noted by Ferguson in some areas of the vein, and small crystals of second generation quartz were reported to line the faces of larger quartz crystals in vugs.

At what is presently called the Golden Arrow Mine in Section 28, Township 2 North, Range 48 East (the Cotter Mine, Desert and Gold Bar Shafts of Ferguson, 1916), a line of inclines follows a northwest-trending shear zone in rhyolite. The zone is up to 4 feet wide and can be traces for 500-600 feet along strike. Closely-spaced quartz veinlets follow the shear zone; pyrite and fine-grained gray sulfides can be seen in brecciated vein material. Wall rock near the veins is argillized and silicified. Ferguson (1916) noted that the veins at the Cotter prospects branched out at right angles from the Page fault and, in 1916, had not continued any great distance from that structure.

In the north central part of Section 32, Township 2 North, Range 48 East, a line of shafts follows a northwest-trending, brecciated quartz vein which follows a shear zone in rhyolite. These workings, not mentioned in Ferguson's 1916 description of the district, are near what appears to be the contact of the rhyolite plug with rhyolitic welded tuff.

GEOCHEMICAL RELATIONSHIPS

Ore samples taken from the Cotter mines (now Golden Arrow Mine) contained high silver values, very high gold values in association with high arsenic and antimony. Lead was moderately high in one sample from this area, and molybdenum was also moderately high in this sample. All other metals were low.

Samples from all other mines in the district were generally lacking in any metallic values. High silver values were detected from samples taken from the workings northwest of the Golden Arrow shaft of Ferguson (1916); one of these also contained anomalous arsenic and two samples from this location were anomalous in beryllium. Anomalous beryllium values were also detected in samples from the Jeep Group area near the original Golden Arrow townsite.

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