

0820 0003
Silver-gold

Scouting report -- Geoventures

NEVADA
NYE COUNTY
BEATTY AREA

(218)

Item 3

BARE MT. AND BULLFROG QUADS

References: USGS Prof. Paper 454-J, "Geology of the Bullfrog Quad., ect."
Cornwall and Kleinhampl, 1964
USGS Map GQ 157, "Geology of the Bare Mountain Quad.",
Cornwall and Kleinhampl, 1961

General: The reference to prospects shown on the Bare Mt. map was given me by Geoventures; the mines on the adjacent Bullfrog map are part of the same mineralization pattern. None of the prospects that might conceivably be of interest for geophysical work on the Bare Mt. map are described in the text that accompanies it; actually, the only mines in the quad of real economic importance are a couple of fluorspar mines. In the Bullfrog quad there are several mines that have produced some silver and gold -- in the Bullfrog Hills and surrounding country, but although extensive work was done at several mines, the total recorded production was only \$1,886,000 in gold and silver, with nearly all of this coming from one mine, the Montgomery-Shoshone Mine.

The extreme eastern part of the Bare Mt. quad -- R 49 E -- is on the Las Vegas Bombing and Gunnery Range, but the remainder of the area is open to access.

Geology: The Bullfrog and Bare Mt. quads lie side by side, the Bullfrog adjoining the west side of the Bare Mt. quad. The northern half of the area is largely Tertiary rocks, mostly acidic tuffs and flows. The southern half has extensive outcrop areas of older rocks, principally Paleozoic sediments (with carbonate rocks predominating); there are no intrusive rocks in these sediments.

Ore Deposits: Most of the gold-silver prospects in the northern, Tertiary part of the area are associated with the Bullfrog Hills Caldera, which is described in detail in PP 454-J. The caldera is twelve miles in diameter, and most of the prospects lie toward the east side of it -- in the eastern half of the caldera and outside it for a few miles farther eastward. The relatively more important mines, including the Montgomery-Shoshone, lie within a few hundred feet of the main bounding fault of the caldera.

The numerous prospects in the NW corner of the Bare Mt. quad, one of the specific references given me by Geoventures, are on typical Tertiary epithermal veins in Tertiary volcanics: vuggy fine-grained quartz, with a little calcite and manganese; none of the ones I examined were more than a few inches wide and a few tens of feet long -- none of them appear worth any further work. A couple of miles west of this area, on the Bullfrog sheet, is the Mayflower Mine, one of the larger ones of the district. The very large dump of this mine is largely barren volcanic rocks, with a few pieces showing coatings of fine-grained crustified quartz half an inch or less thick. The vein, as indicated in a cut next to the main shaft, is a six-foot zone of brecciated volcanics, with the breccia cemented by vuggy quartz. Below the Mayflower dump

is a tailings pond containing a few thousand tons of tailings, presumably all of the production of the mine. The dump material at Mayflower and the prospects farther east indicates that the veins are accompanied by some pyritization of the wall rocks, and that there is some pyrite within the veins, but I would guess the total pyrite content at less than 2%.

FLUORINE DISTRICT

Of the prospects referred by Geoventures south of Beatty, I examined several within a mile radius of the Gold Ace Mine in Section 3, T 13 S, R 47 E. At the Gold Ace a sign with illegible signature states that assessment work for the claim group consisting of the Norde, July and July 1-7 claims was done for the year 1964; this claim group apparently covers the mineralized zone extending about three quarters of a mile along the steep face of the ridge. The zone is a single bed about 20' wide in a series of limestones two or three hundred feet thick in the Cambrian Johnnie (?) formation. Along the entire length of exposures in the ridge front, this bed is at least slightly silicified, the silicification appearing on weathered surfaces as irregular patches of sandy-weathering resistant rock. At the south end of the ridge face (where a shaft symbol is shown on the map) and at an adit in the middle of the ridge face, silicification is somewhat more intense, and in addition there are one or several veins of bullish-looking quartz up to 1' in diameter, with patches of coarse calcite, local light iron staining and a little manganese. These veins are all parallel to the bedding, which all along the ridge face strikes northwest and dips about 30 NE. At the adit, an area about 100' in diameter has been stored and glory-holed, the stopes following zones as much as six or eight feet wide in which there were several quartz veins. I gather, from the distribution of the workings, that the values were principally in the quartz veins, and from the lack of any visible valuable mineral, I assume the main values were gold. Below the middle adit is a mill site, and a tailings pile with a couple thousand tons of tailings, probably representing the entire production of the ridge face.

ARISTA MINE AREA?


Northeast of the Gold Ace, near the quarry symbol shown in the NW corner of Section 2, mineralogically similar mineralization occurs in limestone and sandstone. The principal mineralization is along the short north-striking fault shown on the map; here the limestones on the west side of the fault have been intensely silicified, producing a zone as much as 20' wide in which quartz has replaced as much as half of the rock, some in fairly well-defined stringers, some in broad amorphous patches. Some of the silicified rock has scattered grains of hematite after pyrite. The zone is exposed for a length of about 250', fading out southward and disappearing under cover northward; very recent bulldozing (the bulldozer was still on the ground when I was there) has exposed bedrock north of the disappearance of the zone, but no zone; possibly it is offset or stops against a cross structure. Within the zone there are both old and new exploratory pits, all

shallow. Sample No. Geo 6, assaying trace Au, 0.11 oz. Ag, was a chip sample taken across the face of one of the new pits, representing a 5' width of material that, judging by the fairly abundant hematite after pyrite, I considered better than average value. If my judgement was correct, the average value is pretty low.

Geophysical possibilities: I cannot see any application for geophysics in this area. The deposits associated with the caldera do not, themselves, carry enough sulfides to be amenable to IP work, and I suspect that areas of the surrounding barren volcanics contain relatively abundant pyrite, so false anomalies could be expected. In addition, the area has had an unusually large amount of exploration work in the past, some of it exploring very limited areas very thoroughly, and no real mine has been found, so the history is not promising.

In the area south of Beatty, too, the mineralization does not include enough sulfides to be amenable to IP. In addition, exposures are very good where there are any outcrops at all, so the old-timers can be expected to have prospected any show. The topography -- steep ridge faces dropping off into the alluvium-covered valley -- suggests that there is a large frontal fault just beyond the outcrops, leaving no room for a pediment that might be worth geophysicking; the steep slope of the alluvial fans from the mountain edge down to the flat valley floor of the Amargosa desert supports this inference.

Recommendations: I cannot see any reason to do any further work in this area, unless additional information about a specific property is acquired -- I did not look at all of them by any means.



Arthur Baker III

Area scouted 4/5/65