NEVADA
NYE COUNTY
BRUNER (PHONOLITE, PENELAS)
DISTRICT

References: Nev. Bur. Mines, Bull. 50. "Mineral Resources of Nye County, Nevada," 1951, pp. 26-28.

USGS 1:250,000 topographic map series, Millet Sheet

Location: In the northwestern corner of the county, in T. 14 N., R. 37 E., about 14 miles northwest of Ione. In low hills at elevation about 6,500, where Ione Valley breaks over into the lower Lodi Valley. Good dirt roads traverse Lodi and Ione Valleys, about 3 miles east and west of the district, and a good dirt road connects them about two miles north of the district, but the roads on into the district are barely passable for a passenger car, There is no activity at present, and no sign of any within the past several years.

Property and Ownership: Much of the district is in surveyed but unpatented(?) claims owned by a Mrs. Peterson, of Minnesota. Her property was brought to my attention by Dr. Eiler L. Henrickson, Department of Geology, Carleton College, Northfield, Minnesota, who sent me the survey plats of her ground, and a cross section through the orebody that her husband worked.

The Penelas Mine is in the SE corner of the district; its ownership is unknown.

Geology: Overall, the district is about a mile long, trending about N. 25 W. The north end, however, is represented by a pretty isolated mine, the Paymaster, which has a very big dump on its vertical shaft, but from the sound of the NBM Bull. produced very little gold. The main mineralization is concentrated in the southern end, and extends for about half a mile along a trend of N. 40 W.

The main country rock is rhyolite, which outcrops over most of the south end of the district and most of the way to the north end; at the north end, near the Paymaster, is an area of andesite. Around the south end and west sides of the district tuff outcrops, and I infer from the distribution that this tuff dips to pass under the southern part of the district at a depth of no more than a few hundred feet. It looks as though the tuff is several hundred feet thick.

The Paymaster mineralization was not visible to me; I don't know what they did such deep digging onl There is an adit portal near the shaft, and a couple of other pits, but not much indication that they had anything very strong to sink on.

At the south end of the district, the diggings are: Penelas at the southeast end; July (Peterson) cluster of adits in the middle; and Derelick steep shaft at the west end. (Names from NBM Bull.) The Penelas has a fairly large tailings dump; its workings appear to have been in the tuff, unless a fault drops the rhyolite down here. In the vicinity of the July and Derelict workings the outcrops of rhyolite are quite extensively but weakly silicified and iron stained, with no particular structures that I could identify in my brief examination; rock on the dumps (ore?) was the same. Most of the several July adits are open, but I did not enter them.

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Judging by the Peterson cross section and the NBM description, the July orebody was a nearly vertical chimney rarely more than 20' wide, with high-grade ore near the center, and lower grade ore (labeled as mill ore) on the sides, perhaps making out along more or less veins. The Penelas ore is described in the NBM Bull. as being in two veins in rhyolite and andesite, average width 5', with the main oreshoot 150' long; no values were found below the 900' level. The mine is credited with almost \$900,000 in gold and silver from 69,000 tons.

Ore Potential: The likeliest place for ore that I can see is the place where any mineralization on the July and Derelick properties passes downward from rhyolite into tuff — possibly the change in rock type will make ore, but there is no other reason to hope for it here. The odds are very good that if there are orebodies, they will be no better than the Penelas, which was too small to be of much interest nowadays.

South and southeast of the Penelas a few hundred feet bedrock is covered by alluvium, which extends out into a valley a mile or more wide that makes off from Ione Valley. From the geography, it looks as though there is a pretty extensive pediment here, with rather shallow cover. With either the N. 25 W. or the N. 40 W. trend, the district projects out onto the pediment.

Recommendations: There is nothing visible that suggests to me a possibility of interesting orebodies, except the bare fact of mineralization at the edge of a pediment. It would be interesting to map the district to see if anything can be developed, but there is no point in doing anything more than that, and even that much is not very pressing.

Arthur Baker III

District scouted 11/11/65