4190 0002

Copper

207

Item 2

Scouting report -- Geoventures

NEVADA
MINERAL COUNTY
SANTA FE DISTRICT

SUNRISE FLAT AREA

References: USGS AMS topographic map series, Walker Lake sheet
Nevada B. of M. Bull. 58, "Geology and Mineral Deposits of Mineral County, Nevada", 1961
USGS GQ 46, Geologic Map and text, Mina Quadrangle

General: The Santa Fe district is on the list of districts for me to examine, given me by Geoventures. Although geologically it is undoubtedly a single district covering an area of about 40 square miles, geographically it is split into three separate areas entered from different directions; I had time only to get into one of these, the Sunrise Flat area, on this expedition. Southwest of Sunrise Flat is the New York Canyon area, where most of the district's production has been made. Northwest is an area of several scattered mines, which I will call the Giroux area, for one of the mines in it.

Sunrise Flat is a shallow basin two miles wide by three miles long at an elevation of about 6,800' in the middle of the Gabbs Valley Range; much of it is alluvium-covered, but on the west side low rolling hills of outcropping rocks rise gently, then drop off sharply into New York Canyon and the other canyons making up the western slope of the range. On the east side mountains rise 1,000' higher than the basin, and there is a frontal fault with at least several hundred feet of displacement along this side of the flat. Northwestward the basin is bounded by low hills, some of Tertiary volcanics and some of older rocks, including Cretaceous granite.

Geology: The geology of the entire flat is generalizedon the Mineral County map, and the geology of the south end is shown in some detail on an inset in GQ 46 -- the part adjacent to New York Canyon. Briefly: along the west side of the flat, Triassic Luning formation (mostly limestones) is thrust over Jurassic Dunlap formation (mostly greenstones here) and these rocks are intruded by Jurassic acidic rocks. Most of the basin is covered by alluvium, but on the west side, opposite New York Canyon, there is a small area of Tertiary volcanic cover.

The principal mineralization in Sunrise Flat is at the northwest end, in Luning formation limestones near the edge (or in roof pendants) of a granitic stock. At the edge of the flat is the Black Sam group of claims (not described in Bull. 58), located 1/19/65 by L. N. Lyons and H. Reddy, the latter of 413 G. St., Hawthorne, Nevada. Here magnetite-hematite-limonite gossan with copper staining occurs in garnetite in an irregular zone 200' long, locally 50' wide, trending about east-west, with limestone on both walls. Westward the zone terminates against granite; eastward it passes under alluvium into a small basin about 1,500' in diameter. The basin has local outcrops of granite on the west side, and on the north side some granite, some limestone, and a fairly extensive area of garnetite with no mineralization at all. Old pits open the Black Sam zone fairly well. There is no other sign of mineralization, outside of the Black Sam zone.

Half a mile north of Black Sam is an adit with a fair-sized dump, exploring a garnetized zone in Luning limestone adjacent to granite. There is a very little copper and iron staining on the dump and the outcrops, but if there was any production at all from here, it must have been tungsten. This is probably the Copper Head property, described briefly in Bull. 58. I saw no sign of other diggings at this end of Sunrise Flat.

Along the west side of the basin, for a mile or two south of the Black Sam, outcrops are poor, but bedrock is probably at no great depth; the lack of old diggings suggests that there is no mineralization here, though locally mineralization could be masked by Tertiary volcanics or alluvium. Just over the scarp to the west, breaking down into New York Canyon, there are several sets of diggings, all in Luning formation, and all exploring siliceous zones with local bands of brick-red limonite-hematite that look to me not very favorable. I presume these diggings were exploring for gold, for lack of any visible base metals.

Arthur Baker III

Area scouted March 25, 1965

4190 0002 (copy)

Copper

Scouting report -- Geoventures

NEVADA
MINERAL COUNTY
SANTA FE DISTRICT

SUNRISE FLAT AREA

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