

from NBMG OFR 83-9  
See also 83-10 for  
geochemical results.

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Item 78

NORTH BATTLE MOUNTAIN AREA

3410 0003

The North Battle Mountain area, sometimes referred to as the Stony Point district, is located along the southwest flank of the southern Sheep Creek range about six miles northeast of Battle Mountain. Most of the mines and prospects in this district are in Lander County in the eastern portion of T33N, R45E.

According to Stager, 1977, silver-lead ore was discovered in the area in 1906, but mainly prospecting and little mining took place in the district for the next several years. A carload of ore was shipped in 1910, and in 1927-28, exploration and development began at the Snowstorm mine. The Snowstorm, the only metal mine of consequence in the area, produced about 200 tons of ore during this early period. Work was done in the area over the years, but no major activity took place until barite was discovered in steep slopes of the range above the Snowstorm mine in the mid-1970's. Barite claims were staked in 1977, and production of barite from at least one mine, the Rimrock, was reported in 1982.

During the early 1960's, as part of the Heavy Metals Program, the U.S. Geological Survey did a considerable amount of geologic mapping and geochemical sampling in this part of southern Sheep Creek range. The results of this work, published as U.S.G.S. Circular 595, outlined areas of interesting heavy metal anomalies around the Snowstorm mine. Some exploration interest was generated at the time the Circular was released, but, as far as is known, no metallic deposits were found.

Rocks exposed along the flanks of the Sheep Creek range consist of a narrow northwest-trending band of western-facies Paleozoic rocks which is

capped by Miocene volcanic rocks to the northeast (Stewart and McKee, 1977). The Sheep Creek range has the topographic expression of an elongate mesa with volcanic flows forming the top and Paleozoic rocks forming outcrops along the steep sides. The Paleozoic section shows complicated thrust relationships, with imbricate thrust fault slices containing rocks of Ordovician through Devonian age.

The silver-lead deposits in the vicinity of the Snowstorm mine are described as occurring along narrow, discontinuous quartz veins that strike  $N55^{\circ}-65^{\circ}E$  and dip about  $45^{\circ}S$  and the ore minerals are given as argentiferous cerussite with some azurite, malachite and galena (Stager, 1977). Mining at the Snowstorm itself was done along a  $N20^{\circ}W$ , flat-dipping shear zone which roughly follows bedding in the Paleozoic chert and some workings along the ridge southwest of the Snowstorm are along E-W shear structures. The entire area surrounding the old silver prospects is vividly colored by iron oxides and possibly by oxides of antimony and arsenic. Rock breccia was noted with barite cementing fragments. Quartz cementing material is also present.

Lenses of barite, up to 30 feet in thickness, occur in the Paleozoic section, generally up-slope to the northeast of the old silver prospects. According to Papke (in preparation), the barite occurs in the Devonian Slaven Chert. Two deposits have been mined and the area is still an active barite producer. It is interesting that Papke notes (see property descriptions, Rimrock and Cutler mines) that the barite formations and the enclosing rocks display much more iron staining than is normal for barite occurrences in this area. It is very likely that the colorful iron staining, the heavy metal anomalies and the presence of the small silver-lead occurrences are all related to a period of metallic mineralization that post-dates the thrust faulting.



The suite of heavy metals outlined here by the 1986 U.S.G.S. work is similar to the heavy metal associations known to occur around and with the "Carlin-type" disseminated gold deposits. It is possible that exploration potential for this type of deposit still remains in the Sheep Creek Range.

#### Selected References:

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Stager, H. K. (1977) Geology and mineral resources of Lander County, Nevada: NBMG Bull 88, p. 88.

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