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LONGSTREET DISTRICT

LOCATION

The Longstreet mining district covers a large area in the southern Monitor Range in the vicinity of Big Ten Peak. The district extends from McCann Canyon on the north to Saulsbury Basin on the south and from Stone Cabin Valley on the east to Ralston Valley on the west. The few mines and prospects of the district are widely scattered but the major deposits are near Windy Canyon in Township 6 North, Range 47 East, and southwest of Georges Canyon in Townships 5 and 6 North, Ranges 46 and 47 East. Other prospects flank Big Ten Peak in Townships 6 and 7 North, Ranges 45 and 46 East.

HISTORY

The first mineral locations in this district were made in the area of Georges Canyon in 1903. This part of the district was originally known as the Fresno district (Kral, 1951) and includes the Clipper Mine and Kellys Mine. The Longstreet Mine, in Windy Canyon the northeast side of the district, produced $10,000 during 1930 (Kral, 1951) but its date of discovery is not known. Other properties in the district were being worked in the 1920's and minor production is reported for the late 1920's and for 1938. The total district production is reported to be less than $25,000 (Kleinhampl and Ziony, 1984). Exploration activity appeas to be at a high level in the district at present. Road building and recent drilling was noted on the south side of Kellys Mine Canyon and large blocks of new mining claims have been staked east of Georges Canyon Rim on the east side of the district and in the area southwest of Georges Canyon at the edge of Fourmile Basin.

GEOLOGIC SETTING

Tertiary volcanic rocks undrlie most of the central and southern Monitor Range in the area covered by the Longstreet mining district. The district is entirely within the margins of the Big Ten Peak caldera and the volcanic rocks ar mainly intracaldera rhyolitic to dacitic welded ash-flow tuffs. Large blocks of Paleozoic sedimentary rocks are mapped by Kleinhampl and Ziony (1984) within the volcanic rock outcrop area. These blocks, some up to one mile long by one third mile wide, are interpreted by Bonham and Garside (1979) to be landslide blocks within caldera collapse breccias.

ORE DEPOSITS

At the Clipper Mine, the original 1903 discovery site in the Longstreet district, workings explore a northwest-striking quartz vein that cuts argillically altered rhyolite tuff. Pyrite along with fine-grained gray sulfides are present in the vein quartz. The vein follows a shear zone that can be traced for over 400 feet along strike. Kellys Mine, about one half mile to the north of the Clipper, follows a quartz vein in a similar northwest-trending fault structure. The Kellys Mine vein is about 4 feet wide and can be traced for several hundred feet on surface. Vein material from this deposit contains pyrite, tetrahedrite, and copper oxide minerals.

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Stockworks quartz veining occurs in argillitized, silicified rhyolite tuff at the Longstreet Mine about 6 miles northeast of Kellys Mine. Gold and silver values are reported to occur with quartz, pyrite, and other fine-grained black sulfides in a pipe-like zone within the altered tuff.

High on the eastern slope of Big Ten Peak, on the western side of the district, dozer cuts at the 29 Pines Mine expose a quartz stockworks area in silicified rhyolitic ash-flow tuff. The silicified tuff is brecciated; the breccia matrix consists of silica with fine-grained, dark sulfides within it. About one mile to the southeast of the 29 Pines Mine, a large adit was driven on a buggy, iron-stained quartz vein cutting argillically-altered granite. This granite is interpreted to be an exotic block within intracaldera ash-flow tuff.

Other prospects on the west side of Big Ten Peak, including the Balck Hawk Mine (Last Chance Mine) and the White Gold claims were also developed within large exotic blocks, rootless blocks of Paleozoic metasediments, floating in the ash-flow tuffs. At the Blackhawk Mine, brecciated quartz vein material containing pyrite, sphalerite, and galena occur in silicified, brecciated limestone. Drilling in this area proved the limestone to be a slide block within Tertiary mineralized Paleozoic Outcrops.

Recent activity was noted in the area of Kellys Mine, the Longstreet Mine, the 29 Pines Mine, and two unnamed areas along the east side of the district. Atlas Minerals has a large claim area surrounding the warm spring east of Georges Canyon Rim where drill roads have been cut in an altered ash-flow tuff. At the Lince claims, on the edte of Fourmile Basin south of Georges Canyon, Alhambra Mines Co. has staked an area of quartz veining in highly silicified rhyolite. The outcrop of silicified rock is about three-quarters of a mile long and displays local areas of iron-oxide staining and brecciation. Drilling has been done here, but the results are not known.

GEOCHEMICAL RELATIONSHIPS

Ore samples from the Clipper Mine - Kellys Mine area contained low gold and high silver associated with anomalous antimony and molybdenum values. Base metal values for all samples from this area were very low. Samples from the Longstreet Mine were similar, gold and silver associated with moderately anomalous molybdenum and very low base metal values. High antimony occurred withy low arsenic in one Longstreet Mine sample; the second sample from the mine area contained low antimony with high arsenic.

Samples from prospects on the west side of Big Ten Peak, from occurrences within the Paleozoic exotic blocks, reported low arsenic, antimony, gold, and silver but high lead and zinc values. Two samples were moderately anomalous in bismuth an cadmium; one contained anomalous tungsten.

All other samples taken from the district showed very low values for all elements.

SELECTED REFERENCES

Bonham, H. F., Jr., and Garside, L. J. (1979) Geology of the Tonopah, Lone Mountain, Klindike, and northern Mud Lake quadrangles, Nevada: NBMG Bull. 92.

Kleinhampl, F. J., and Ziony, J. I. (1984) Mineral resources of northern Nye County, Nevada: NBMG Bull. 99B.

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