

...ation, plus the occurrence at Gold Acres of gold along the Roberts Mountains thrust fault, which underlies the anomaly at an unknown depth, indicates a possible area for further exploration.

Item 36

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Swales Mountain, Elko County.—At Swales Mountain in the Independence Mountains 15 miles north of Carlin, gold, silver, and base metals occur along the axial region of an anticline intruded by quartz porphyry. Both the anticline and intrusive are younger than the Roberts Mountains thrust fault. Geologic mapping of Paleozoic rocks in the Independence Mountains from U.S. Highway 40 north to Pie Creek has been completed, and an evaluation of the mineral potential of the Swales Mountain quadrangle is in preparation.

In order to check complex stratigraphic and structural relations at depth and to test the occurrence of a possibly favorable environment for ore deposits, three geologic core drill holes (totaling 3,956 ft) were completed between May and September 1967. The drill holes revealed that (1) most of the limestone underlying Swales Mountain is Roberts Mountains Formation (Silurian) in the lower plate of the Roberts Mountains thrust fault; (2) mineralization in both upper and lower plate rocks is related to intrusive contacts rather than to stratigraphic or structural horizons; and (3) little leached and bleached limestone similar to that at the Carlin mine is present.

Mapping started in Tuscarora district.—Reconnaissance geologic mapping started recently in the Mt. Blitzen quadrangle northwest of Tuscarora, Elko

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