

768
Feb. '89
Cordillera
Roundup
Core Stack

89/02/08

SILVER BUTTE PROPERTY - SUMMARY

307516

The Silver Butte Property is located 25 kilometres north of Stewart, British Columbia. The Property consists of one crown grant, three reverted crown grants, and one twelve-unit modified grid system claim. Tenajon Resources and Esso Minerals Canada are currently exploring the Property under terms of a 50:50 joint venture agreement; Tenajon is operator and Esso is providing technical assistance.

The Silver Butte Property is underlain by upper Triassic to Lower Jurassic Hazelton Group rocks which consist of partially subaerial andesitic to dacitic, calc-alkaline volcanics, coeval intrusions, and interbedded sediments (Alldrick, 1988). Relatively massive, fine-grained andesite, the major host to mineralization in the Stewart Camp, is the main unit on the Property. It is underlain by east dipping or complexly deformed black argillites and siltstones and is overlain by medium to coarse-grained andesites thought to be an extrusive equivalent of the Premier Porphyry. At Silver Butte, mineralized zones are generally found below this upper contact although hydrothermal alteration penetrated to upper stratigraphic levels. Megacrystic, two-feldspar Premier porphyry intrudes strata on the north and east side of the Anomaly Creek Fault; its genetic relation to the mineralization is not clear.

Three major, subparallel, moderately west-dipping, post-mineral faults, the Anomaly Creek, Gully and North Gully Faults, cut the main target area on the Property into three west-dipping stratigraphic slices. Displacements probably involved right lateral oblique slip movement. Right-lateral movement has also been noted on moderately northwest and north-dipping faults that cut the Facecut/35 Zone which has

also been offset an unknown direction and distance by the Anomaly Creek Fault. These features are thought to represent a smaller segment of a regional right-lateral strike-slip shear regime which has either been tilted east or had a significant west driven thrust component. North to north-northwest trending fold axes add support to this scenario and to the likelihood of a similar-trending fold axis between the Silver Butte and Big Missouri properties as well as on the ridge above the Kansas Zone.

Four mineralized zones have been discovered on the Silver Butte Property. Two, the Facecut/35 and Kansas Zones, are relatively well drill defined whereas, the West Kansas and Anomaly Creek Zones were discovered late in the 1988 program and are consequently not well defined. Except for the Facecut/35 Zone, mineralization is largely blind although zones are marked at surface by quartz-carbonate veins and stockworks which cut pervasively altered andesites. Alteration consists of inner quartz-sericite assemblages which are commonly bounded by chlorite-bearing assemblages. These give way to k-feldspar-dominant alteration assemblages at depth. The upper limit to the mineralized zones might coincide with this change from sericite-chlorite to k-feldspar-dominated alteration.

High sulphide, base-metal-rich gold mineralization of the Facecut/35 Zone and low sulphide, gold-rich mineralization of the Kansas Zone are the two major types of mineralization on the Property. Mineralized zones are cut by at least two stages of veins which are dominated by quartz. Siliceous breccias consist of quartz-k-feldspar assemblages and are a common feature in and peripheral to gold mineralization.

The attitudes of the zones are variable although gross dimensions are similar. The Facecut/35 Zone strikes 350 degrees and dips 80 degrees east. It is about 150m long, 2 to 12m wide and extends 100m to the 750m level where it is offset by the Anomaly Creek Fault. The zone has been defined by 35 diamond drill holes and two crosscuts. The highest precious metal values were noted in the 35 crosscut where a 12m interval assayed 28.5 g/t Au (uncut) and 88.4 g/t Ag.

The Kansas Zone is located 150m south of the Facecut/35 Zone, between the Anomaly Creek and Gully Faults. The zone dips about 30 degrees east and measures about 200m long and between 1.5 and 13.25m thick; significant gold values extend about 102m down-dip. Fourteen diamond drill holes currently define the zone; 71.1 g/t Au (uncut) and 84.5 g/t Ag over 5.2m is the highest grade intersection.

The West Kansas Zone is located west of the Kansas Zone and the Gully Fault. It has been tested by five drill holes over a 170m strike length although significant values are confined to 2 intersections. This includes one spectacular intersection that contains centimetre size aggregates of visible gold and runs 93.9 g/t Au (uncut) and 50.5 g/t Ag over an apparent true thickness of about 5.5m. The zone strikes north-south and dips 60 degrees west.

The Anomaly Zone is situated 250m northeast of the Kansas Zone and occurs east of the Anomaly Creek Fault. Two diamond drill holes have tested the apparently steeply-dipping zone over a strike length of about 70m. The most significant intersection is 16.9 g/t Au (uncut) and 7.5 g/t Ag over an apparent true thickness of 2m.

Ron Britten
Walter Melnyk