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July 10,1990

BASIN MINERAL CLAIMS Alice Arm Area, B.C. 103P/11W

Introduction

This summary report on the Basin reverted Crown granted mineral claims, recently acquired by Corona Corporation, has been prepared at the request of Mr. Darrel Johnson. Information contained herein is based principally on the writer's personal knowledge of the property and its regional setting, gained while conducting fieldwork on behalf of the then B.C. Department of Mines and Petroleum Resources in 1968 and 1969. Sample analyses referred to were performed by the Department Analytical Laboratory.

Mineral Property, Location and Access

The Basin group of 4 reverted Crown granted mineral claims (Lots 1096-1099) is situated in a small cirque at an elevation of 1100-1200 metres mid-way between Kitsault River and Kinskuch Lake 20 km north of Alice Arm. The geographic centre of the property is at latitude $55^{\circ}39$ ' North and longitude $129^{\circ}26$ ' West.

The claims are centred on a small tarn lake in open, alpine terrain featuring relatively gentle slopes with the exception of the west part of the claims below the 3,500 ft. (1065 m) contour which marks the edge of a 35° slope extending into the Stark Creek valley. Bedrock is best exposed in the cirque headwalls.

Access is by helicopter from Alice Arm (Dolly Varden camp at Klayduc Creek) or Stewart. A trail between the old Torbrit mine and Kinskuch Lake crosses the northern part of the claims (see attached sketch map) - this trail is in disrepair and is noted as an emergency "escape" route only.

Previous Work

Initial work on this property, carried out in the 1920's, consisted of several open cuts and the driving of a

short adit. The property was apparently dormant until the mid-1960's when some sampling and 1.3 km of vertical loop EM surveying were completed.

The only record of recent work is a prospecting report filed for assessment purposes in 1983.

Geological Setting

The Basin property and surrounding area is underlain by Jurassic (Hazelton Group) volcanic and sedimentary rocks. A regional northeast striking fault zone, extending from east of Kitsault River to north of Kinskuch Lake, passes through the claims and marks the limits of varying lithologies along its extent in the area northeast of the property.

The property and adjacent area includes a northerly trending, sinuous contact between argillaceous siltstones of the lower part of the Hazelton Group and an overlying assemblage of andesite pyroxene porphyry flows and fragmental volcanic rocks, bedded tuffs and shaly siltstones. This assemblage is massive to well bedded with individual units having thicknesses of between 8 and 15 metres.

Some open folding of both the underlying sediments and the slightly younger volcanic-sedimentary sequence is evident (see sketch) but the regional trend is northwest with moderate easterly dips.

A north-northeast striking, 30 metre wide diabase dyke of Tertiary age parallels the trend of the regional fault zone.

Mineralization

Known mineralization on the Basin property is spatially related to the north-northeast striking regional fault zone. As illustrated on the sketch map, quartz-sulphide veining is exposed in several pits and one short adit within and marginal to the fault zone over a horizontal distance of nearly 1 km.

The most impressive mineralization is that seen in the 4.5 metre long adit which was driven northeasterly on a flat, 0.45 metre wide quartz-carbonate-barite breccia vein containing lenses and stringers of tetrahedrite, chalcopyrite and minor galena and sphalerite. The vein, which attains its greatest width at the portal and pinches to 5 cm mid-way

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along the adit, appears to be developed along the contact between volcanic tuff-breccia and shaly siltstone.

An 18 cm thick, 0.6 metre long lens of massive tetrahedrite (identified by the GSC as freibergite) is exposed at the bottom of the flat vein on the southeast side of the portal. Along the old trail, 15 metres west of the adit, a 130-200 kg dump includes vein material with stringers of chalcopyrite and tetrahedrite. Three samples collected by the writer include the following:

Location	Width(m)	Ag(g/t)	Au(g/t)	<u>Cu(%)</u>	<u>Pb(%</u>)	<u>Zn(%)</u>
1-Portal (vein)	0.45	414.8	trace	2.64	0.01	0.08
2-Portal						
(lens)	0.18	11026.3	trace	28.52		0.38
3-Dump	grab	3517.7	trace	11.90	-	0.23

100 - 150 metres northeast of the adit (and apparently north of the property boundary) a 0.75 metre wide coarse quartz-carbonate-barite vein, exposed in two pits, is apparently barren of sulphides.

225 -375 metres southwest of Basin Lake, vein material is exposed in 4 pits and trenches marginal to a draw which marks the trace of the regional fault. Quartz-breccia veining with abundant malachite-azurite staining and variable amounts of pyrite, chalcopyrite and tetrahedrite is exposed in a 7.5 metre long trench. A 0.6 metre wide, north-northeast striking, steeply west dipping shear zone marks the eastern limits of the vein which appears to be developed along a contact between pyroxene porphyry flows and shaly siltstone. A chip sample across the zone returned the following results:

Location	Width(m)	Ag(g/t)	Au(g/t)	Cu(%)	Pb(%)	<u>Zn(%)</u>
4	1.8	48.0	trace	1.09	_	0.05

Conclusions and Recommendations

The Basin property includes two principal silver-bearing zones, both of which are spatially related to a regional north-northeast striking fault zone and to a lesser degree formational contacts.

Prospecting the entire length of the fault zone within the central claims area is hampered by overburden of unknown

depths in the vicinity of Basin Lake. A 1965 EM survey failed to detect any conductive zones in this area. Weak conductors were noted topographically above, and east and west of the zone exposed in the short adit near the northern claims boundary. Cause of these conductors has not been established.

It is recommended that an initial investigative program on the property consist of establishing precise property location (old survey pins can probably be found near the west shore of Basin Lake and original survey data is on file) followed by geological mapping and rock geochemistry. Detailed soil geochemistry and perhaps a VLF-EM survey should be carried out along the trace of the regional fault.

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References

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