White Rocks Mountain (Bear Mountain) Nr. Kelowna, B.C.

Preliminary examination by
A. E. Aho September 8, 1969

Comments on examination of White Rocks Mountain (Bear Mountain) Property of Ivan Greg and Associates, near Kelowna, B.C.

September 9, 1969 Dr. A. E. Aho

The property is situated approximately 12 miles north of Brenda Mines and can be easily reached by several roads, the most direct being from West Bank near Kelowna, a distance of some 12 to 15 miles. The property was examined by myself, accompanied by Ivan Greg and Robert Alviani, from 11.00 a.m. to 4.00 p.m. September 8, 1969

The area of interest, covered by approximately 100 claims, corresponds to an aeromagnetic anomaly shown on geophysics paper 5207 Shorts Creek B.C. Sheet 82 L4. This aeromagnetic anomaly reflects a magnetite-rich zone of hornblende diorite or syenite with associated hornblende-rich ultrabasic phases of extremely varied grain size outcropping between elevations of 5,000 and 5,800 feet on the southwest flanks of White Rocks mountain. Outcrops are locally abundant in some areas but moderate glacial overburden masks most of the area.

Mineralization consists of finely-disseminated to patchy chalcopyrite occurring in saussuritized or epidote-rich hornblende gabbro or hornblendite phases of the gabbroic complex. Magnetite occurs widely throughout these rocks in both disseminations and irregular schlieren but in every case where chalcopyrite was noted magnetite appeared to be abundant and in some cases closely associated with, and rimming, the chalcopyrite. No other sulphides were noted except in probably highly metamorphosed country rocks

in which minor chalcopyrite, pyrite and pyrrhotite were noted in connection with examination of one of the larger geochemical anomalies. Other rock types in the area appear to be hornblende diorite or syenite of fine to medium grain and a granitic rock of probably quartz-monzonite composition which forms the larger intrusives shown on the G.S.C. Map 1059A, Vernon Sheet.

Exploration work to date on the property consists of a number of pits blasted into the basic rocks, most of which exposed chalcopyrite to varying extent. In addition, three short X-ray drill holes have been drilled as noted in a report by A.C. Skerl dated January 12, 1969, with assays up to 0.6% copper. A local geochemical soil grid consisting of some 85-90 samples has defined several geochemical anomalies which in general are open on three sides, i.e. to the north, east and south. A ground check of the five main geochemical highs showed good correspondence with mineralized ultrabasics in three localities, an undetermined source in one, and correlation with mineralized rusty metamorphic rocks on the northeasternmost anomaly. In addition random samples taken in a few other localities of the property are reported to contain some 200 to 400 ppm copper which might be reasonably expected in such a complex of basic rocks mineralized with copper.

Prospecting of the area is reported to have yielded similar mineralization brought in by individuals from an area about 2 miles to the southwest, and a similar old prospect is described in previous reports on White Rocks mountain, I believe by Dr. Cockfield. Greg reports also having traced the magnetic anomaly by means of an A-3 magnetometer and helicopter for a distance of some 2 miles to the south toward ground held either by Capozzi or by Noranda

who have a group of claims to the west. Ground to the north and northeast is presently held by Texas Gulf Sulphur who are conducting a 69-hole overburden drill program on an area where I did a dip needle survey for White Rocks Syndicate in 1959 or 1960.

Although this mineralization is somewhat unique and differs from most economic copper deposits in British Columbia, its relatively widespread reported distribution and relationship to the gabbroic complex suggests that it could prove to be abundant on portions of the sizeable overburden-covered parts of the property, similar to deposits of other gabbro complexes in which copper has been mined to depth. This type of late magmatic mineralization may be expected to extend to considerable depth as steeply-dipping lenses or pipe-like bodies within the gabbro complex, but probably has limited horizontal continuity. The property would be readily susceptible to exploration by cutting a grid on 400-foot line spacing, doing soil sampling, running a magnetometer survey, and possibly doing induced polarization with followup testing of likely target areas by means of an overburden drill program. Sufficient water is available in a small creek draining the summit of the mountain for diamond drilling. In the event of development topography could be favourable for open pit or underground operation.

The property thus appears to have possibilities of sufficient potential to warrant further exploration providing a suitable deal can be made which will enable comprehensive-enough work to be done to test all likely targets before commitments for heavy option payments are made.

A. E. Aho

AEA:eph
September 9, 1969

Position of Trenches Approx.

Trench P.D.H.

P.D.H. Posn. Approx.

BARD CLAIMS

10+00 E.

30+00 E.

60+00 E.

44+00 S.

H.P.

No Outcrop

BEAR CLAIMS

ALPY CLAIMS

Scattered Outcrop Qtz - Monzonite

Trenches (1969)

Largely Calcite and Epidote

Pits and short Drill Holes (1968)

Outcrop

H.P.

Qtz.

No Outcrop

RAL

CHARLIE CLAIMS

Locations Approx much local alteration

Stream float all Argillite

Alter. Limestone

00+00 S.

Scattered Qtz - Monzonite Outcrop

LEGEND

MONZONITE & QUARTZ MONZONITE.

ARGILLITES & LIMY ARGILLITES.

BASIC ROCKS.

70 SCHISTOSITY.

ATLAS EXPLORATIONS LTD.

WHITE ROCKS MOUNTAIN

B.C.

GEOLOGY

N.T.S. AREA 82/E,L.

SCALE: 1"=1000'

NOVEMBER, 1969.