

June 9th, 1969.

N.B.C. HAT CLAIM GROUP

DIAMOND DRILLING

An AQ wireline diamond drill was flown into the Hat Creek property by Connors Drilling Ltd. of Vancouver on May 18th, 1969. Their purpose was to drill ^{two} 300-foot holes on the property from locations 400' apart in order to investigate the causes of a strong ground electromagnetic anomaly which appeared to be associated with an aeromagnetic anomaly in the same area.

Drill hole #1 was collared at a point about 100' south of the anomalous zone at coordinates 27+70'NW, 25+40'NE and was drilled at an inclination of -45° on a bearing of $N30^{\circ}E$. Broken and caved ground resulted in relatively poor core recovery and slow progress. The drill hole encountered a black argillite which contained nominal amounts of pyrite as veinlets and as disseminations. These sulphides are believed to be the source of the EM anomaly mentioned above.

Beyond the argillite, the drill intersected a medium-grained hornblende diorite which was found to contain abundant magnetite mainly associated with the mafic minerals of the rock and which undoubtedly was the cause of the aeromagnetic anomaly.

Drill hole #2 was located about 400' further to the northwest at coordinates 31+78'NW, 25+31'NE, and was also drilled at an inclination of -45° and on a bearing of $N30^{\circ}E$. However, this hole was

abandoned at 90' after encountering considerable difficulty in penetrating through the zone of fractured argillite with the drilling equipment available on the property.

A brief summary of the logs of each drill hole is as follows:

D.D.H. No. 1

- 0'-76' Casing.
- 0'-51' Overburden and boulders.
- 51'-248' Very hard, microcrystalline black argillite, generally badly fractured, ground and broken up. Mineralization consists of thin veinlets and scattered specks of pyrite.
- 248'-267' Anhydrous and argillaceous sediment, grey coloured and locally 'muddy looking'; contains a few scattered specks and cubes of pyrite.
- 267'-302' (end) Hornblende diorite, generally medium-grained, greenish in colour, and hard, locally porphyritic with epidotized phenocrysts. This rock locally contains abundant concentrations of mafic minerals, mainly hornblende. A pocket magnet responds readily to the magnetite associated with the hornblende minerals. Some small specks of pyrite are scattered locally in the rock but no visible chalcopyrite.

D.D.H. No. 2

- 0'-82' Casing
- 0'-30' Boulders and overburden.
- 30'-90' Badly shattered and crushed black argillite; locally speckled with pyrite cubes, however, core recovery is very poor and advance very slow and difficult; this drill hole abandoned.

FIELD MAPPING

Geologic mapping on a scale of 1" = 200' was carried out in the vicinity of the drill sites and located several large outcrops of

a basic diorite rock which closely resembled that found in drill hole #1. No obvious structural features or contacts were observed and the only sulphides noted were occasional specks of pyrite. Locally, some outcrops exhibited fairly intensive epidote alteration and some small fracture fillings of iron oxide.

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