

C O P Y

Box 448,
Merritt, B.C.

May 12, 1958.

PROGRESS REPORT No. 4

CONFIDENTIAL

Mr. J. A. Mitchell.
700 Burrard Building.
Vancouver 5, B.C.

Dear Jim:

Re: NICOLA SYNDICATE (Venture 26)

During the period from April 29th to date, we have prospected, both visually and by dip needle, most of the important geologic features in the Aspen Grove area, as indicated on the enclosed map. These include many of the old showings in the copper-bearing area south of Courtney Lake; the zone of probable faulting from Tule Lake south to the north end of Missezula Lake (shown on my map as the "Kentucky Fault"); the small granitic stocks along Shrimpton Creek; the Allison Fault for 14 miles south of Courtney Lake (west of Highway No. 5); and the topographic depression marked by "Gulliford Fault" and Davis Lake, including part of the "Allison Stock". The following results were obtained:

1. A magnetic anomaly was discovered just west of Tule Lake. Anomalous dips ranging from 20 to 80 degrees, read on the swing from the vertical zero position with the Sharpe dip needle, were recorded over an area 1500 feet long by 225 feet wide. This includes an area 500 feet long by 50 feet wide with Anomalous dips of 60° or higher.

The anomaly parallels roughly the Tule Lake fault and occupies a drift-covered area between Nicola volcanics on the west and diorite on the east. The drift is believed to be less than 10 feet deep. The nearest outcrops of both the volcanics and the diorite are only slightly more magnetic than normal, so the anomaly is believed to be due to a buried deposit of magnetite-bearing rocks. Hans Veerman, of Noranda, visited the property with me today and took spot readings with a Sharpe Super-dip magnetometer, indicating possible intensities over the centre of about 6000 to 7000 gammas, or possibly greater. Noranda has also offered to run self-potential and electromagnetic surveys as soon as practicable.

It is extremely important that this find be kept in strictest confidence until the ownership of the ground is determined. At least part of the anomaly is believed to be on claims that were under option to Kennecott two years ago and the remainder is probably held by G.S. Eldridge. All the claims are in good standing and the ownerships are being determined. Meanwhile, the anomaly will be checked for the possible presence of buried sulphides. Old workings nearby include open cuts, a shaft and a caved adit.

The dumps show considerable malachite and some chalcocite, while old reports state that native copper was also found on this property.

2. The 10-mile depression containing Alleyne, Kentucky and Bluey lakes, and extending south to Missezula Lake, was traversed in some detail but no significant anomalous readings were obtained. This valley, 1/2-mile wide, is very probably a fault-controlled "Graben". The Nicola volcanics form a scarp on the west side, Tertiary basalts form vertical bluffs on the east side, south of Alleyne Lake and the valley itself is partly filled by glacial deposits.

A 10-foot fault-breccia zone, developed by an old adit and an open cut, was discovered on the west side of Kentucky Lake. It was mineralized with bornite and chalcopyrite and was not reported by Rice. However, it had been staked a few days previously. In addition, a little copper-stain was found in Nicola Volcanics just northwest of Missezula Lake but did not justify staking.

3. All the small granitic stocks in the area have proved barren and low in magnetism, the only exception being the diorite along the Tule fault. The intruded volcanics along the contacts are almost invariably slightly granitized and contain epidote, calcite and hematite but are not mineralized.

4. The Allison Fault, so far as covered, is also barren and low in magnetism. It is chiefly marked by a topographic depression, but where exposed the Nicola volcanics are highly sheared and altered. One sheared zone, however, about 6 miles south of Kidd Lake, contains considerable quartz, pyrite and magnetite, with a very little copper stain. This has also been recently staked. Dip needle readings were low here, despite visible magnetite.

5. The "Culliford Fault" and its possible extension N.W. through Davis Lake was also barren and low in magnetism, although most of it was obscured by overburden or Tertiary volcanics.

CONCLUSIONS

Tentatively, it appears that the most potential conditions for the occurrence of mineralization in this area would be the conjunction of:

- (1) A fault.
- (2) A granitic intrusive
- (3) The Nicola Volcanics
- (4) A particularly favorable horizon in the Nicola such as a volcanic breccia, preferably oriented in approximately an east-west direction. (Almost all deposits examined have followed easterly shearing of jointing, and most have been in volcanic breccia of the Nicola formation).

PLANNING

We plan to work gradually southward, focussing attention on areas containing as many of the above criteria as possible, including the Summers Creek area.

Yoursvery truly,

(Sgd) W. N. Plumb.

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✓ File

/R
Vancouver Office.
May 15, 1958.