# RP 107

ADVANCE REPORT ON THE VILLEBON - DENAIN MAP AREA, ABITIBI COUNTY



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107- Région de Villebon-Denain, Comté d'Abitibi par G.K. Lowther

> (Ce rapport n'a pas été traduit en français, voir version anglaise).

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# ADVANCE REPORT ON THE VILLEBON-DENAIN MAP-AREA

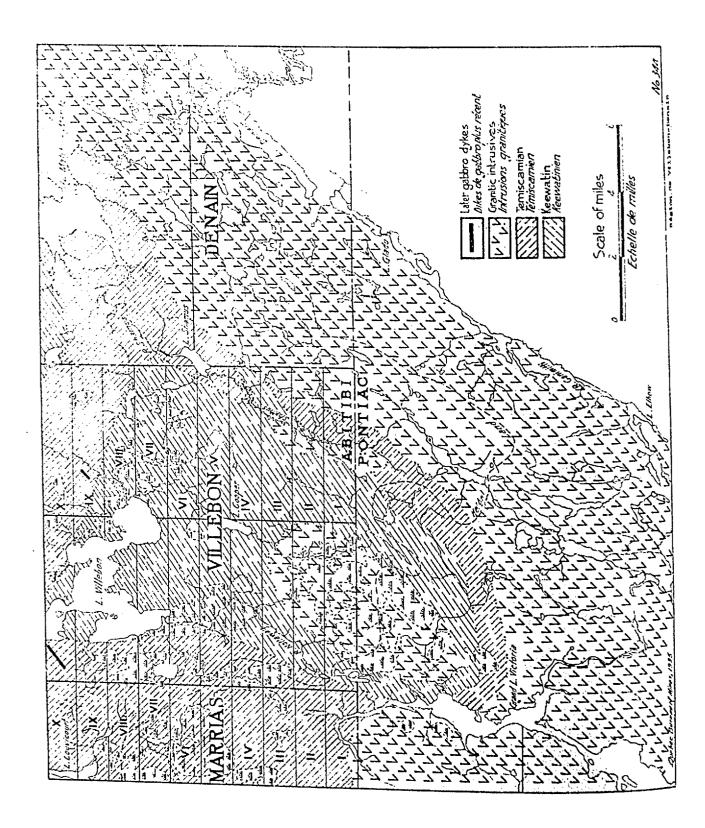
COUNTY OF ABITIBI

PROVINCE OF QUEBEC

by

G.K. Lowther

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#### Area Mapped

The writer spent the summer of 1935 in the field, completing the survey of the non-granitic rocks about the headwaters of the Bell river. The area mapped includes most of Denain and Villebon townships, and the region immediately to the south, between Grand Lake Victoria on the west, and Lake Gladu and the Canimiti river on the east. Outcrops along Grand Lake Victoria and the headwaters of the Ottawa were examined some 20 miles south of the southern boundary of Marrias and Villebon townships, in search of any possible occurrences of sedimentary and volcanic rocks in that region.

#### General Geology

Sedimentary and volcanic rocks were found chiefly in Villebon township and in the northwestern portion of Denain township. They are the continuation to the south of bands already mapped as Temiscamian and Keewatin, respectively, in the north.

The sediments east and southeast of Lake Matchi-Manitou contain many lit-par-lit injections of granite and pegmatite, varying in thickness from a fraction of an inch to several hundred feet. These granitic injections become more numerous towards the east, and the sedimentary bands remaining are coarser in grain, less schistose in character, and contain many garnets. This complex of sedimentary and igneous rocks has been mapped as injection gneiss.

To the south the granite contact with the sediments is quite different. Large dykes of pegmatite and associated muscovite granite intrude the biotite schists, but the schists themselves are not intimately injected in lit-par-lit fashion.

A plug of porphyritic granite, about four miles in diameter, occurs on the southern boundary of Villebon township, immediately to the north of the main granite contact. The rocks surrounding the plug have been altered to amphibolites, those on the north apparently being derived from the metamorphism of basic and intermediate volcanic rocks. The amphibolites south of the plug may originally have been greywackes. A few dykes of quartz gabbro are believed to be the youngest consolidated rocks in the area.

#### Economic Geology

Exploration work carried out by the Consolidated Mining & Smelting Cc., on claims southeast of Simch lake, has revealed by presence of gold within two miles of the north boundary of Villeba township. Conditions appear to be essentially the same in the grant stone belt to the south, so that the writer believes that that portion of the area, underlain by volcanic rocks, is worthy of prospecting. Considerable iron sulphide mineralization was noted in amphibolite rocks near the margin of the granitic intrusive occupying the southwest corner of Villebon township.

Conditions are less favourable in the remainder of the area. There is little likelihood of commercial mineralization in the sedimentary schists and gneisses which occur to the east and south in Denain township. Suitable fracturing would not be expected in these rocks, and no sulphide replacement deposits were observed

Tourmaline was the only rare-element mineral observed in the pegmatite dykes to the south, although beryl has been reported from a pegmatite dyke on Granet lake.