

RP 114(A)

ADVANCE REPORT ON THE GREVET MAP-AREA

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Québec 

ADVANCE REPORT
ON THE
GREVET MAP-AREA

PROVINCE OF QUEBEC

DEPARTMENT OF MINES AND FISHERIES

BUREAU OF MINES

ADVANCE REPORT

ON THE

GREVET MAP-AREA

by

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1936

QUEBEC

MARCH 1937

PR No.114

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LOCATION

The Grevet Map-area is situated on the east side of the Bell River, about fifty miles north of Senneterre, Abitibi. It includes the townships of Franquet, Grevet, Mountain, Quévillon, Verneuil, and Wilson.

The area is readily accessible by canoe from Senneterre, and the interior of the four western townships may be reached easily by means of the Wedding, Quévillon and Wilson rivers.

GENERAL GEOLOGY

Glacial tills and clays cover the whole area. Exposures of bedrock are few and are generally confined to small ridges throughout the area, the best exposures being found on the northern side of the ridges in most cases. On many of the ridges no bedrock exposures were observed, and very few outcrops were found in the swamps and muskegs that cover a large part of the area. An exception to the general condition is found in the southwest portion of Mountain township, and adjoining areas, where exposures of bedrock are very abundant.

The greater part of the area is underlain by Keewatin greenstone of intermediate composition. This is cut by two large bodies of granite and

numerous smaller ones. The large bodies extend westward from the eastern part of the area on either side of Wilson lake.

KEEWATIN GREENSTONES

Over half of the area is underlain by Keewatin greenstones. These occur chiefly in the central and western part of the area. To the south pillow lavas and agglomerates, both of medium composition, are quite abundant. These are especially well exposed along the southern part of Quévillon lake. The rock in this part of the area is very massive with only a few small shear zones. This belt seems to continue eastward to Wilson lake.

In the central and northern parts of the area the rock is considerably sheared in places, with the development of chloritic and sericitic schists, which are frequently mineralized with pyrite to a considerable extent. To the north of the Wedding River the general trend of this shearing is slightly south of east; however, south of the river it is usually north of east. The dip of this shearing is almost vertical in the northern part of the area, while in the southern part the dip is to the north, and in places is as low as 40°.

There are numerous bands of a silicic nature, probably tuffs, interbedded with the more basic greenstones. These are most abundant in the central and northern parts of the area.

There is a narrow band of highly sheared rhyolite porphyry extending through the northern part of Quévillon and into the southeastern part of Franquet

township. This band may extend further, eastward into Grevet. In general this rock is a grey rhyolite with numerous quartz phenocrysts. It is extensively sheared and finely laminated. In places this rock resembles an intrusive quartz porphyry, but it may be a rhyolite flow.

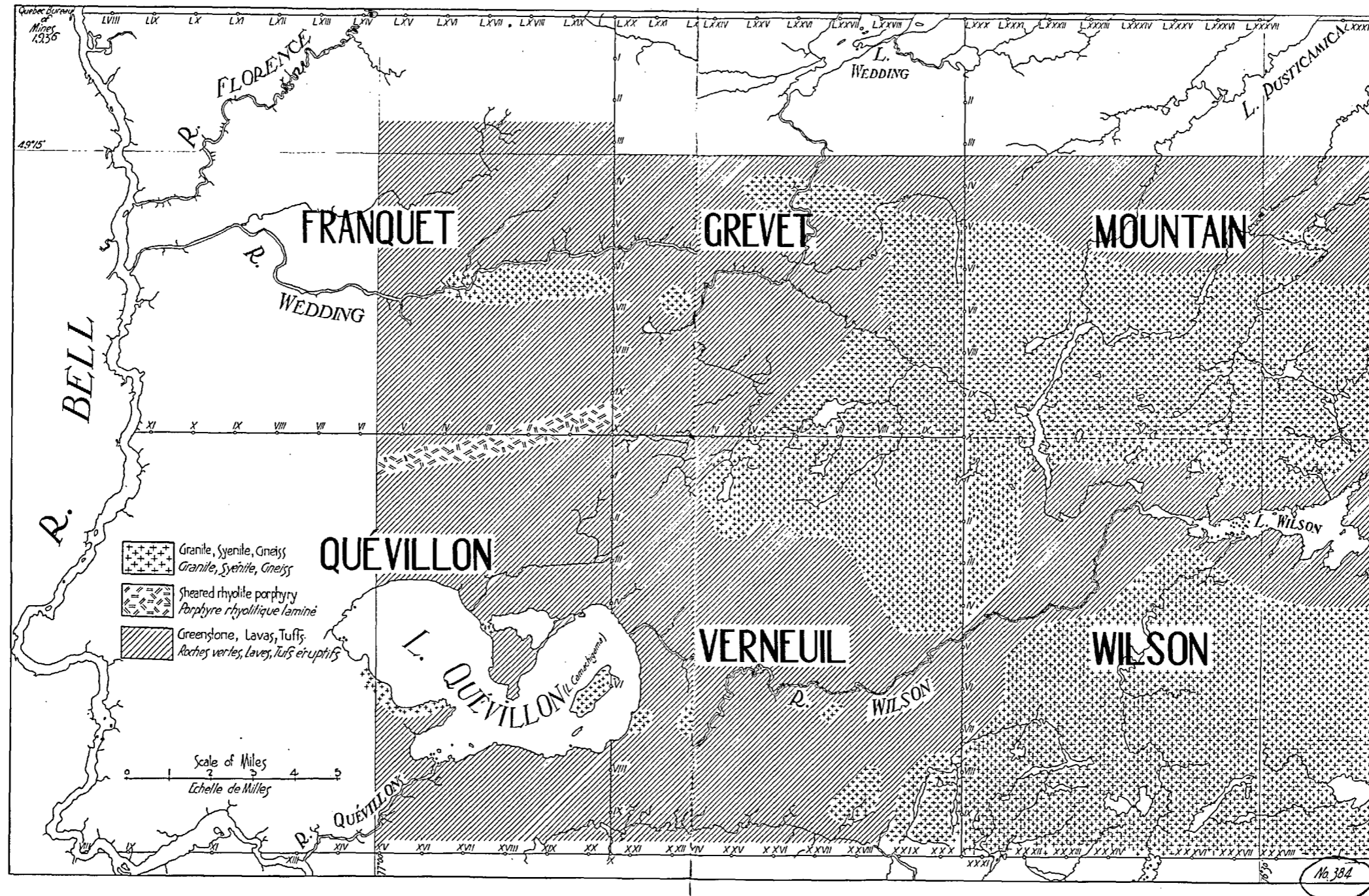
INTRUSIVE ROCKS

Granites and related rocks occupy the greater part of the eastern half of the area, and there are several small bodies in the central part of the area. Several different types were recognized but little attempt was made to separate them in the field, and relationships between them were not determined.

The most conspicuous rock of the granite family is a very coarse grained orthoclase porphyry, which contains numerous phenocrysts up to two inches in length. A large body of this occupies the northeastern corner of Verneuil and extends into the adjoining townships. This type of granite also outcrops in the large island in Quévillon lake and in three places on its shore line.

There is a small body of hornblende syenite in the southeastern part of Verneuil township.

A large, coarse grained, diabase gabbro dyke extends as scattered offset ridges in a north-easterly direction from the northwestern part of Quévillon lake to the second half-mile portage up the Wedding River (about two miles east of the Franquet-Grevet line). The gabbro is considerably mineralized with pyrite in places and the surrounding rock is highly sheared and well mineralized with pyrite.



STRUCTURE

The general trend of the greenstones is east, or northeast by east with a dip steeply to the north in most of the area, although in Wilson township dips as low as 40° were recorded.

In general the greenstone in the southern part of the area is quite massive, but there are certain zones in this part along which there has been considerable shearing. In the northern part, the rock is extensively sheared for a considerable distance on either side of the Wedding River; however, amygdaloidal pillow lavas were found near the river in which the amygdules were not distorted.

ECONOMIC GEOLOGY

At the beginning of the season practically all of the area to the north of $49^{\circ}15'$ in Franquet and Grevet townships had been staked due to the Cameron Lake discoveries. However, practically no claims had been staked south of this line and there was little evidence of prospecting. During the summer the major part of a zone of highly sheared, somewhat tuffaceous chlorite schists, extending to the north of the Wedding River in the eastern part of Franquet township was staked. Some claims were also staked in the south-central part of Grevet township.

Analyses were made of grab samples taken from four localities. The first in Grevet township at about 10 chains west of tag 88 on the Wedding River (just off the southwest corner of the large loop to the south). This location consists of two parallel quartz veins, varying from 6 to 18 inches in width, that are highly mineralized with pyrite and separated

by a zone of chlorite schist about five feet wide, that is extensively brecciated, filled with quartz stringers and highly mineralized with pyrite. Due to overburden and swamp only about 10 feet of the zone was seen, but it is quite probable that it extends for some distance. An assay of a specimen from this zone gave 0.006 ounces of gold and 0.154 ounces of silver. While this is not of commercial grade the place probably warrants further examination. Sheared, brecciated, and mineralized areas were found for some distance to the west of this locality. A sample taken from a brecciated rhyolite dyke mineralized with pyrite, located half a mile west and slightly south of here, gave no gold and a trace of silver.

The third assay was made of a sample taken from a quartz vein, averaging some 10 feet in width and followed for about 200 feet, cutting through a small syenite body located in the southeastern part of Verneuil township. This vein has a barren milky white appearance. The assay indicated traces of both gold and silver.

The fourth sample was taken from a highly silicified shear zone that is extensively mineralized with pyrite and located north of the northeastern bay of Wilson lake. This shear is quite local but highly altered. The sample yielded no gold and only traces of silver.

The granites in the eastern part of the area vary from massive to highly foliated, but in no place observed, appeared favorable for prospecting, although there are numerous veins of quartz in the southwestern part of Mountain township just west of the large lake. A small granite body just south of the Wilson River and about three miles west of the Verneuil-Wilson township line carries a lot of disseminated pyrite in places, suggesting that there might be some favorable prospecting ground in the immediate vicinity. Nothing of unusual interest was observed in the other small bodies of granite

in the area, except for the large vein in the syenite body in the southeastern part of Verneuil. However, their presence suggests structures favorable to ore deposition.

The belt of greenstone along Wilson lake is highly recrystallized and very massive, showing little shearing or mineralization, and does not appear to be favorable prospecting ground. The rock around Quévillon lake is similarly very massive. However, there is a sheared zone slightly mineralized a short distance to the north of the northeastern part of the lake, and another one cutting along a narrow strip to the south of the lake. These zones are probably worth further examination.

The central and southern parts of Franquet and Grevet townships are marked by numerous zones of shearing, which are highly mineralized with pyrite in places. This condition extends south into Verneuil and probably Quévillon but in the latter there are too few outcrops to draw definite conclusions. No unusually promising veins were observed in this area but the altered and mineralized nature of some of the shear zones indicates that it warrants considerable prospecting.

Probably the most favorable localities for prospecting would include: a strip through Franquet and Grevet townships just north of the Wedding river; the area around the big loop to the south in the Wedding river in Grevet township and extending south a short distance into Verneuil; and a strip through the central part of Franquet township following along about three miles south of the Wedding river.
