Canada
Department of Mines
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BUREAU OF ECONOMIC GEOLOGY
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LEGEND

PRECAMBRIAN

POST-TIMISKAMING

- 5 — *Gabbro*
- 4 — *Granite, syenite and granodiorite*
- 2 — *Quartz diorite*

TIMISKAMING SERIES (?)

- A3 — *Greywacke and some arkose, conglomerate, tuff, and iron formation*

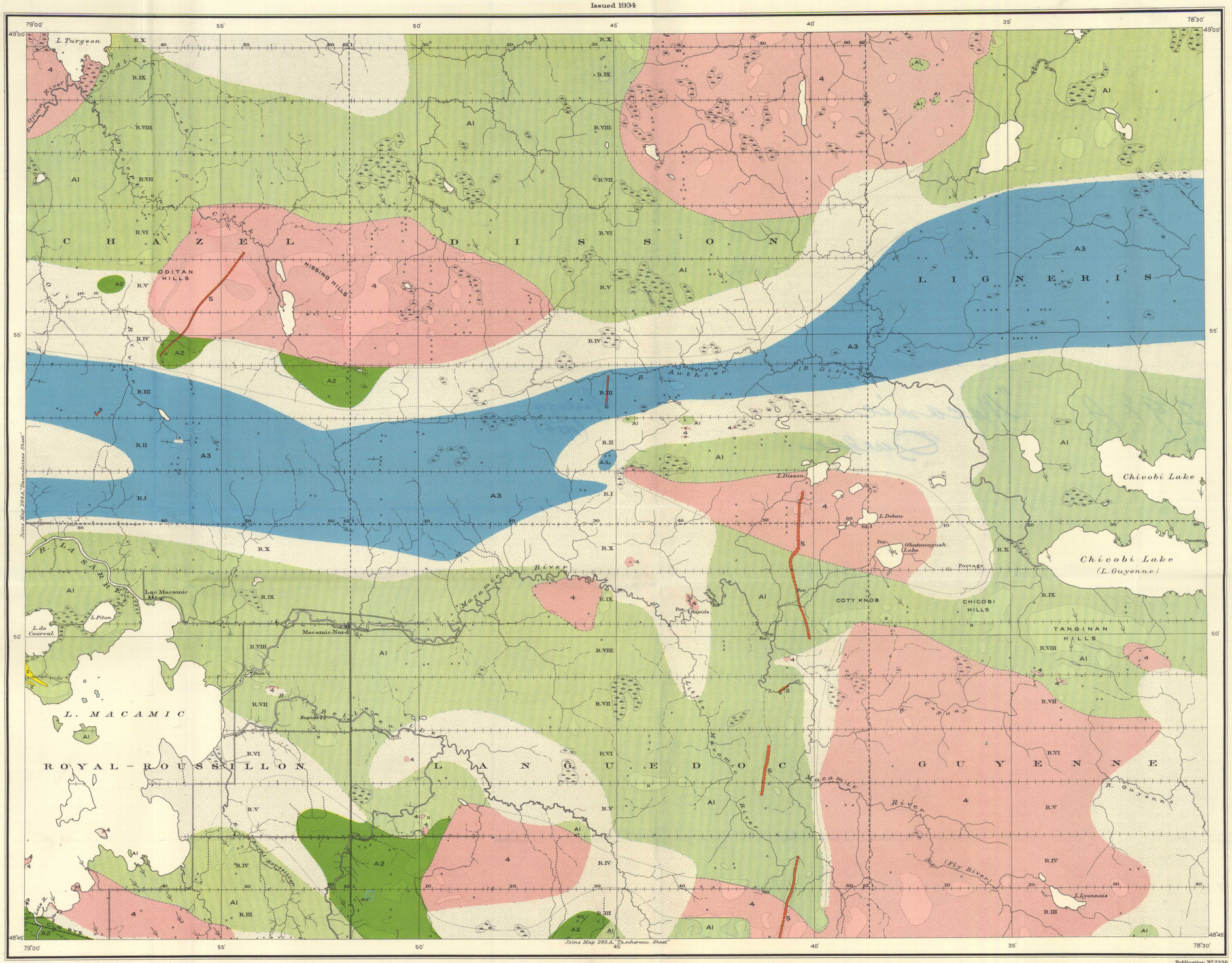
KEEWATIN SERIES

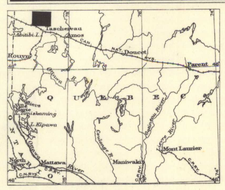
- A2 — *Tuff, breccia*
- A1 — *Chiefly altered andesite and rhyolite, minor amounts of interbedded tuff and breccia*

Symbols

- *Drift covered areas in which bedrock outcrops are few or lacking. Small rock outcrops;* ×
- *Geological boundary (defined)*
- *Geological boundary (approximate)*
- *Geological boundary (assumed)*
- *Bedding (inclined, vertical)*
- *Glacial striæ*
- *Prospect* ×

Geology by O. L. Backman, 1931, *and* 1932.





Approximate magnetic declination.

MAP 298A

MACAMIC SHEET

ABITIBI COUNTY

QUEBEC

Scale, $\frac{1}{63,360}$ or 1 Inch to 1 Mile

Miles 1 ½ ½ ¼ 0 1 2 3

Kilometres 1 0 1 2 3 4 5

Legend

Road and buildings	*School*
Road not well travelled	*Post office*
Road along township boundary	*Abandoned camp site*
Bush or winter road, trail, or portage	*Township boundary*
Railway	*Marsh*
Church	

Surveys by Topographical Division, Bureau of Economic Geology, Department of Mines; and the Department of Lands and Forests, Quebec. Compilation of aerial photographs supplied by the Topographical and Air Survey Bureau, Department of the Interior.

PHYSICAL FEATURES

Macamic area lies within the clay belt of northern Ontario and Quebec, therefore its surface is an undulating plain underlain by clay with some sand. The lowest point is L. Turgeon, 910 feet above sea-level. Morainal hills and ridges rise from 50 to 100 feet above the clay lowlands. A few rocky hills form higher prominences, and of these the highest are the Tanginan hills rising to 1,465 feet above sea-level.

The southern part of the area has been cleared for agriculture, and contains a number of farms. The remainder, with the exception of some burnt or logged sections, is heavily wooded, chiefly with black spruce. Few of the numerous streams are navigable by canoe; except for the roads in the agricultural part, and such navigable streams as the Macamic, Authier, and Ojima rivers, travel is by trails, many of which follow the land subdivision lines.

GENERAL GEOLOGY

The Keewatin series is primarily a group of volcanic flows (A1), chiefly andesitic with minor amounts of rhyolite and of bedded tuffs and breccias. Larger bodies of altered pyroclastics occur in Languedoc and Chazel townships and near the village of Macamic. These are probably high in the Keewatin and are mapped separately (A2). The Keewatin rocks are now chiefly chlorite, hornblende, biotite or sericite schists. Greywackes and related sediments (A3) occur in a belt which trends nearly east-west across the central part of the area. With the greywacke are minor amounts of arkose, conglomerate and banded iron formation. Although considerably metamorphosed they are quite fresh-looking, with the bedding well preserved in most places. Structurally and lithologically they resemble the Timiskaming rather than the Keewatin sediments, but they are so far from the Timiskaming rocks south of Rouyn, that any correlation must be inconclusive.

The volcanics and sediments have been folded and are intruded by granite, syenite, granodiorite (4) and quartz-diorite (2). The granitic rocks are pink or light to dark grey and although generally massive have porphyritic and gneissic phases. In the granite around L. Turgeon quartz comprises nearly one-half of the rock. The boundaries of the granitic bodies are rather sharply defined against the Keewatin rocks, except certain cases, particularly near the southern boundary of the area, where transitional contact zones occur.

The gabbro (5) (diabase) forms vertical dykes. It is quite fresh and commonly has a diabasic texture.

The major structural features are indicated by the belts of sedimentary rocks. Field evidence suggests that the pyroclastics lie along a synclinal fold in the Keewatin and that the clastic sediments are also in a synclinal fold.

No evidence was obtained of any pronounced angular unconformity between the clastics (A3) and the volcanics.

MINERAL DEPOSITS

There are no mines within the area. Prospecting for gold and copper has been carried on in the past few years and some assessment work has been done on a few properties.

Sulphide mineralization occurs at several localities in altered Keewatin volcanics near intrusions of granite and related rocks. The sulphides are chiefly pyrite and pyrrhotite with some chalcopyrite, sphalerite and galena and a few specks of molybdenite. They occur as disseminations or as massive lenses replacing sheared volcanics and are usually accompanied by silicification and sericitization.

RELATED PUBLICATIONS

SUMMARY REPORT, PART C, 1928 (*pp. 34, 36-39, 51-52, 56-58*): Desmeloizes area, Abitibi district, Quebec; by J. B. Mawdsley.

MEMOIR 166: Geology and Ore Deposits of Rouyn-Harricanaw Region, Quebec; by H. C. Cooke, W. F. James, and J. B. Mawdsley.

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