

**DESCRIPTIVE NOTES**

The country is a plain underlain by muskeg and clay with a few gravel ridges. Outcrops of bedrock are scarce and in some localities are almost lacking.

The area is underlain by groups of sedimentary (1) and volcanic (2) rocks invaded by granitic rocks (3) and by youngest of all, dioritic rocks (5). All are of Precambrian, presumably Archean age. The volcanic rocks resemble those called Kee-watin in neighbouring districts and presumably are of that age. Their relations with the sedimentary rocks is unknown but it is thought that the sediments are the older.

The sedimentary rocks (1) are now largely hornblende-mica gneisses many of which are garnetiferous, and mica schists. They appear to have been sandstones and greywackes with some shales. Conglomerate was noted at one locality on Zadi lake in Neely township. Intrusive granitic rocks are everywhere associated with the sediments though in some areas they are represented only by small pegmatite and aplite dykes. In some areas the sediments and intrusives form an intricate mixture (4) and both types have lost their main characteristics. Much of the intrusive matter in such areas is pegmatitic. In other areas mapped as underlain by division 4, the two classes of rocks occur in about equal volume, each forming sharply defined, small bodies.

The volcanic rocks (2) are generally dark coloured because of an extensive development of chlorite. Some fine grained, schistose chloritic rocks possibly were tufts; no breccias were observed. The volcanic rocks are intruded by the granitic rocks but not in the intimate fashion exhibited by the sediments.

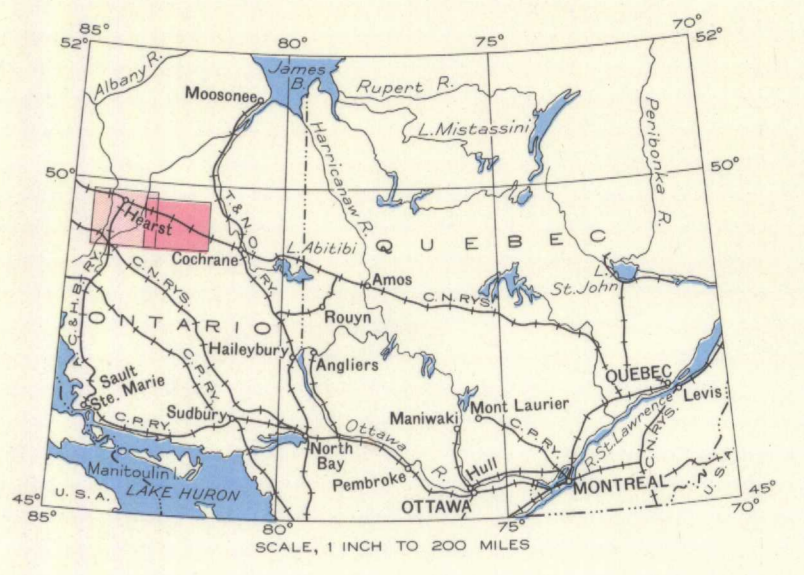
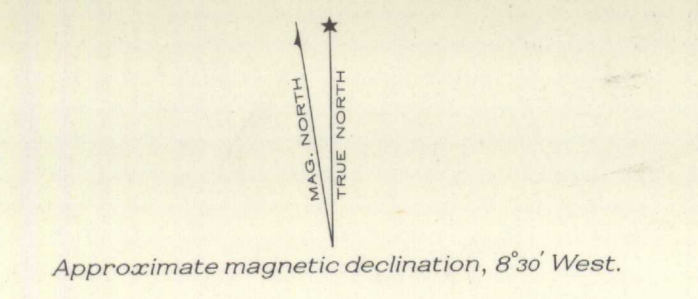
The granitic rocks (3) are mainly granite and granite-gneiss. Granite porphyry was seen in two localities and probably occurs elsewhere. The dioritic rocks (5), believed to be the youngest of the Precambrian assemblage, are widely distributed in the form of small, irregular masses and a few, large bodies. The diorite is massive, unfractured, and the least altered of all the rocks.

Considerable prospecting has been done, largely in McCowan and Cumming townships where mineralized shear zones are reported to carry gold.

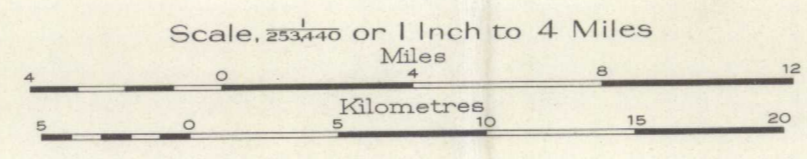
- LEGEND**
- 5 Diorite, quartz diorite, and associated basic intrusive rocks
  - 3 Granite, granite-gneiss, pegmatite and associated acid intrusive rocks
  - 2 Volcanic rocks, mostly basic and in many places much altered
  - 4 Sedimentary and granitic rocks intimately mixed
  - 1 Greywacke, conglomerate, arkose, sandstone and possibly shale, all highly altered, mostly to paragneisses

- x Observed bedrock outcrops
- Geological boundary (defined, approximate) .....  
 Bedding (inclined, vertical) .....  
 Road well travelled .....  
 Road not well travelled .....  
 Trail or portage .....  
 Post office .....  
 District boundary .....  
 Stream, approximate .....  
 Height in feet ..... 800'

**SOURCES OF INFORMATION**  
 Compiled and reproduced by the Bureau of Geology and Topography from information supplied by Provincial Government Departments. Geology by L. J. Weeks, 1935 and 1936.



MAP 411A  
**HEARST - KAPUSKASING AREA**  
 (EAST SHEET)  
 COCHRANE AND ALGOMA DISTRICTS  
 ONTARIO



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