



Figure 2. Simplified geological map of southern District of Keewatin used for geomathematical study.

Contacts between 34 generalized rock units were plotted from data base stored on magnetic tapes for about 1.2 million picture elements measuring 500 m on a side.

0 120  
KILOMETRES  
0 60  
MILES

OPEN FILE  
DOSSIER PUBLIC  
**718**  
GEOLOGICAL SURVEY  
COMMISSION GÉOLOGIQUE  
OTTAWA

- |                   |    |   |                         |
|-------------------|----|---|-------------------------|
| PALEOZOIC         | 40 | Limestone   |                         |
|                   | 38 | Basalt  |                         |
|                   | 36 | Dolostone, siliceous dolostone  |                         |
|                   | 35 | Sandstone, conglomerate (Thelon Formation)  |                         |
|                   | 39 | Granite (including Nuelin Lake porphyritic granite)   |                         |
|                   | 37 | Felsic volcanics and quartz-feldspar porphyries (Pitz Formation)                                      |                         |
|                   | 34 | Alkalic igneous rocks (syenite, syenodiorite)   |                         |
| HELIKIAN          | 31 | Volcanics and volcanogenic sediments (Christopher Island Formation)                                   |                         |
|                   | 30 | Sandstone, conglomerate, siltstone, mudstone (Kazan, South Channel, Angikuni Formations)              |                         |
|                   | 29 | Gneisses (quartzo-feldspathic, migmatite, melanocratic)   |                         |
|                   | 28 | Quartz diorite, diorite, syenodiorite   |                         |
|                   | 27 | Quartz monzonite, granodiorite, syenite   |                         |
|                   | 26 | Lithic greywacke, subgreywacke, conglomerate - Ennadai Group  |                         |
|                   | 25 | Paragneiss, migmatite, hybrid gneiss  |                         |
| APHEBIAN          | 24 | Dacite, andesite  |                         |
|                   | 21 | Units 18, 19 and 20 undivided   | - Hurwitz Group         |
|                   | 20 | Dolomite, argillite   |                         |
|                   | 19 | Slate, shale, siltstone   |                         |
|                   | 18 | Orthoquartzite, conglomerate, greywacke   |                         |
|                   | 16 | Quartzite, arkose, conglomerate, greywacke  | - Montgomery Lake Group |
|                   | 15 | Gneisses (Quartzo-feldspathic, migmatite, granulitic, layered, includes MacKenzie Lake metasediments) |                         |
| ARCHEAN/ APHEBIAN | 14 | Gabbro  |                         |
|                   | 13 | Quartz monzonite, granodiorite, granite   |                         |
|                   | 12 | Gneisses (quartzo-feldspathic, migmatite, layered)  |                         |
| ARCHEAN           | 11 | Ultramafic intrusives and flows   |                         |
|                   | 10 | Quartz diorite, diorite and gabbro  |                         |
|                   | 9  | Granodiorite, quartz monzonite, syenite   |                         |
|                   | 4  | Iron formation, quartz-magnetite, jasper, hematite, pyrite, siderite                                  |                         |
|                   | 3  | Greywacke and slate, minor tuff   |                         |
|                   | 1  | Conglomerate, arkose  |                         |
|                   | 5  | Sediments and volcanics (intercalated)  |                         |
|                   | 7  | Undifferentiated volcanics  |                         |
|                   | 6  | Felsic to intermediate volcanics  |                         |
|                   | 8  | Mafic volcanics (includes minor intrusives)   |                         |