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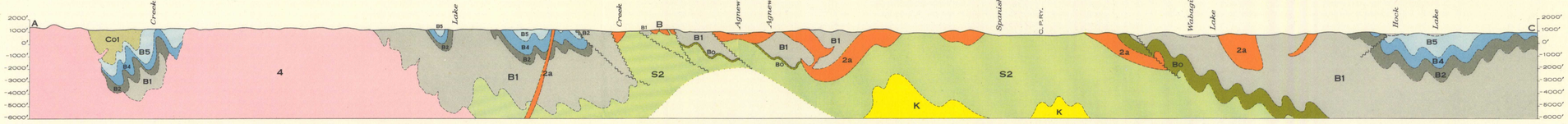


Structural section along line A-B-C

LEGEND

RECENT AND PLEISTOCENE

Glacial drift, stratified lake beds (sand and clay)
Small rock outcrops ×

LATE PRECAMBRIAN

- 5a,b — BASIC INTRUSIVES. a – Olivine diabase dykes. b – Quartz-bearing greenstone dykes
- 4b — BATHOLITHIC INTRUSIVES. Potash-rich granite, pegmatite

KEWEENAWAN (?)

- 3a — NICKEL-BEARING IRRUPTIVE. Granophyric "acid edge" differentiate
- 3c — Transition zone
- 3b — Noritic "basic edge" differentiate

WHITEWATER SERIES

- W3 — CHELMSFORD SANDSTONE. Grey feldspathic quartzite
- W2 — ONWATIN SLATE. Dark carbonaceous and graphitic slate
- W1 — ONAPING TUFF. Coarse to fine pyroclastics of intermediate to acid composition, locally conglomeratic; lava flows; also includes dykes of several kinds and large fragments and layers of quartzite

KILLARNEAN

- 4a — Stratiform mixture of pink and grey gneisses and minor bodies of 4. The pink gneisses are closely related to 4b above; the other gneisses are probably, and in some cases certainly, metamorphosed Huronian and pre-Huronian formations
- 4 — BATHOLITHIC INTRUSIVES (possibly same age as 4b). Potash-rich granite, pegmatite
- 2a, 2b-g — BASIC INTRUSIVES (Nipissing diabase, etc.). Chiefly diabase (a) but including a miscellaneous group (b-g) mostly late Precambrian, the age relationships of which are not well known.
  a – Sills, dykes and flows of quartz diabase
  b – Gabbro with orthorhombic pyroxene
  c – Red-weathering greenstone
  d – Pale, aplitic ? intrusive
  e – Hornblende gabbro
  f – Diorite and associated rock types
  g – Brown-weathering dykes within nickel basin

PRE-HURONIAN

COBALT SERIES

- Co3 — BANDED CHERTY QUARTZITE. Fine grained, thin-bedded chert-like quartzite, grey or variocoloured
- Co2 — LORRAIN QUARTZITE. White, feldspathic to pure quartzite, with some lenses of quartz-pebble conglomerate
- Co1 — GOWGANDA FORMATION. A variable assemblage of boulder conglomerate, greywacke, laminated varved greywacke, and impure quartzite, of frigid-climate or glacial origin

BRUCE SERIES

- B5 — SERPENT QUARTZITE. White, feldspathic quartzite; occasional argillitic members
- B4 — ESPANOLA FORMATION. Thin-bedded recrystallized calcareous silt with some beds of magnesian limestone (marble)
- B3 — Siliceous magnesian limestone (marble), with thin alternating beds of recrystallized calcareous silt (formerly called Bruce limestone)
- B2 — BRUCE CONGLOMERATE. Boulder conglomerate, with some layers of greywacke
- B1 — MISSISSAGI QUARTZITE. White, feldspathic quartz, often with argillitic partings; occasional argillite members
- Bo — RAMSAY LAKE CONGLOMERATE. Bouldery to pebbly conglomerate grading into greywacke and quartzite

ALGOMAN AND (OR) LAURENTIAN

- I — BATHOLITHIC INTRUSIVES. Potash-poor granite and gneiss, pegmatite

SUDBURY SERIES

- S2 — McKIM FORMATION. Dark grey slate and white quartzite with intergradations; some thin beds of conglomerate

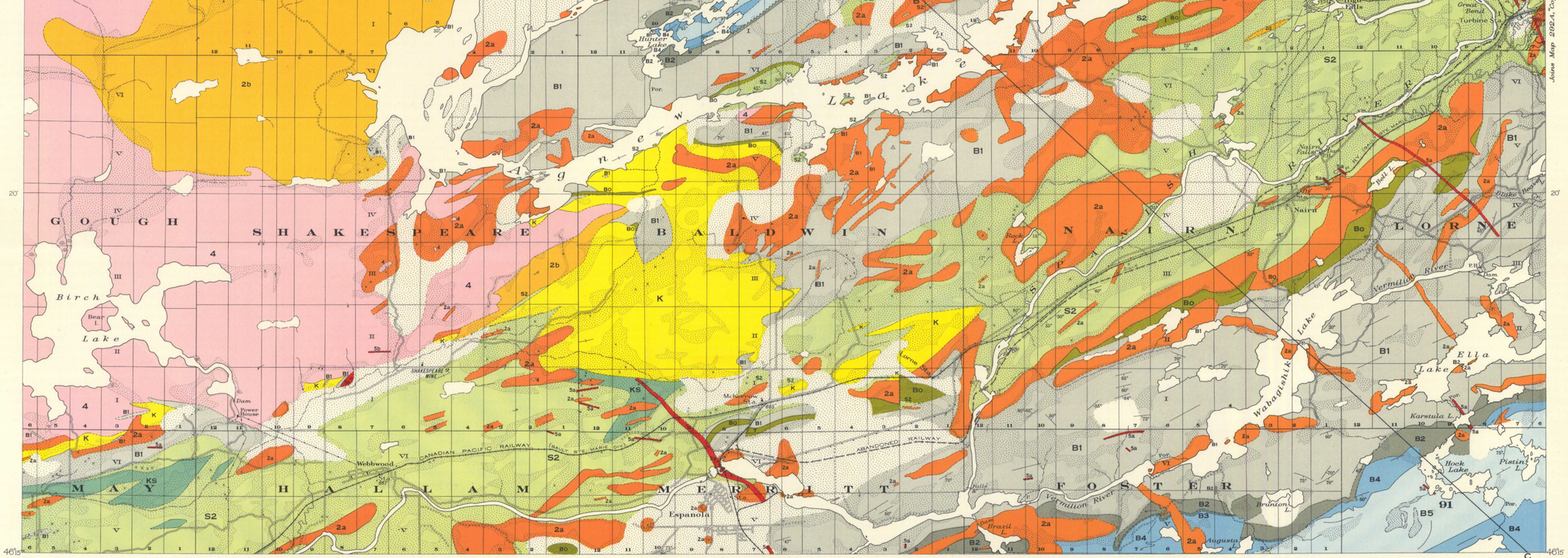
KEEWATIN

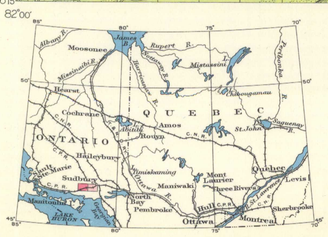
- KS — Unusually wide and intricate parts of the transition zone between Keewatin and Sudbury series, which consists of repeated alternations of volcanic and sedimentary materials and represents diminution and final replacement of Keewatin volcanism by Sudburian sedimentation
- KI — COPPER CLIFF FORMATION. Massive, pink-weathering rhyolite and related rocks (Copper Cliff arkose of earlier maps)
- K — Schistified complex of volcanics, local intercalations of clastic sediments, iron formation

Symbols

- Geological boundary (defined)
- Geological boundary (approximate)
- Strike obtained from aerial photographs
- Strike and dip measured on ground
- Schistosity
- Fault (defined, approximate)
- Mine ×
- Prospect pit ×

Geology by W. H. Collins and assistants, 1916, 1917, 1925, 1926, 1927, 1929, and by T. T. Quirke, 1915.





Scale, 1 Inch to 200 Miles

Approximate magnetic declination, 7° West

MAP 291 A

ESPANOLA SHEET

SUDBURY DISTRICT
ONTARIO

Scale, 1/31680 or 1 Inch to 1 Mile
Miles 0 1 2 3
Kilometres 0 1 2 3 4 5

Legend

- Road and buildings
- Road not well travelled
- Road along township boundary
- Trail or portage
- Railway
- Power transmission line
- Power transmission line along road
- Power transmission line along railway
- Church
- School
- Post office
- Triangulation station △
- Rapid or fall
- Marsh
- Form lines, approximate interval 50 Feet
- Height in feet 815

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