

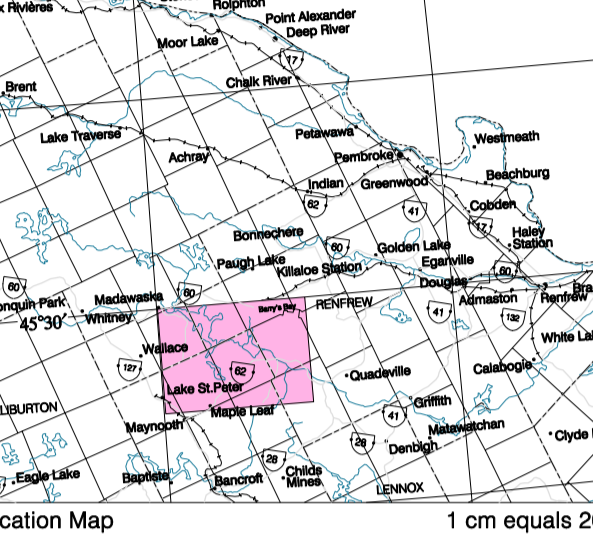
PRECAMBRIAN GEOLOGY BARRY'S BAY AREA

Scale 1:50 000

NTS Reference: 31 F/5

Queen's Printer for Ontario, 2001.

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SOURCES OF INFORMATION

Thematic information on this map is tied to a digital base map derived from map 31 F/5 of the National Topographic System, scale 1:50 000. UTM co-ordinates are in NAD27 datum, zone 18.

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Magnetic declination approximately 12°36' W in 2001.

Geology not tied to surveyed lines.

Metric conversion factor: 1 foot = 0.3048 m.

CREDITS

Geological compilation by R.M. Easton, 2001.

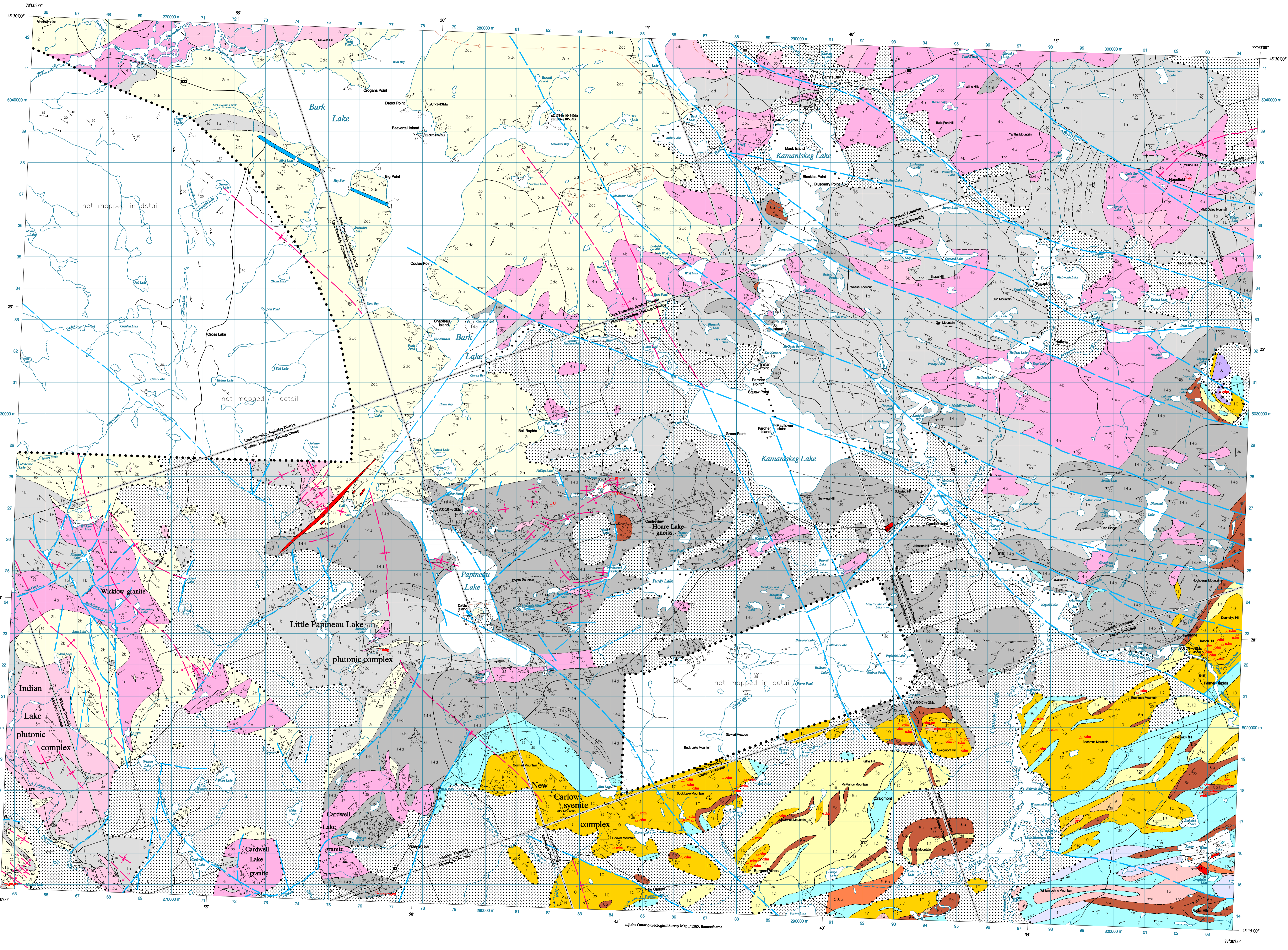
Digital drafting by E.I. Murphy and R.M. Easton.

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Easton, R.M. 2001. Precambrian geology, Barry's Bay area, Ontario Geological Survey, Preliminary Map P.3444, scale 1:50 000.



- LEGEND**
- PHANEROZOIC**
- CENOZOIC\***
- QUATERNARY**
- PLEISTOCENE AND HOLOCENE**
- Swamp, bog and peat accumulations; marl; fluvial and lacustrine silt, sand, gravel; glacioluvial sand, gravel, boulders; sandy, boulder, glacial till.
- UNCONFORMITY**
- PRECAMBRIAN<sup>bc</sup>**
- PROTEROZOIC**
- NEOPROTEROZOIC**
- 16** Mafic Intrusive Rocks (Grenville Dike Swarm) (850 Ma): Tholeiitic diabase dikes
- INTRUSIVE CONTACT**
- MESOPROTEROZOIC**
- 15** Potassic Pegmatite (1100–1000 Ma): Pink, red and white, quartz-alkali feldspar pegmatite dikes and veins
- INTRUSIVE CONTACT**
- HIGH-GRADE REGIONAL METAMORPHISM**
- CENTRAL METASEDIMENTARY BELT BOUNDARY ZONE<sup>d</sup>**
- 14** Tectonites
- 14a Irregularly layered to straight, locally porphyroclastic gneiss; derived from migmatitic tonalitic to felsic gneiss; cut by younger syn- and post-tectonic pegmatite veins
- 14b Irregularly layered to straight, locally porphyroclastic gneiss; derived from migmatitic dioritic to tonalitic gneiss (unit 1a); cut by younger syn- and post-tectonic pegmatite veins
- 14c Irregularly layered to straight, locally porphyroclastic gneiss; derived from intermediate composition gneiss (unit 2a); cut by younger syn- and post-tectonic pegmatite veins
- 14d Irregularly layered to straight, locally porphyroclastic gneiss; derived from intermediate composition gneiss (unit 2b); cut by younger syn- and post-tectonic pegmatite veins
- 14e Irregularly layered to straight, locally porphyroclastic gneiss; derived from dioritic to tonalitic gneiss (unit 1b); cut by younger syn- and post-tectonic pegmatite veins
- 14g Block tectonites, containing amphibole and quartzofeldspathic gneiss fragments, cut by younger syn- and post-tectonic pegmatite veins
- FAULTED CONTACT?**
- CENTRAL METASEDIMENTARY BELT (units 5 to 13)**
- Alaskite Suite (1250–1240 Ma)<sup>e</sup>**
- 13** Felsic Intrusive Rocks: Medium-grained, massive to foliated, monzogranite to syenogranite
- INTRUSIVE CONTACT**
- 12** Diorite and Related Mafic Intrusive Rocks: Foliated to gneissic amphibolite; locally containing relict textures indicating a gabbro to dioritic protolith
- INTRUSIVE CONTACT**
- Late Trondhjemite Suite (1280–1250 Ma)<sup>e</sup>**
- 11** Tonalite and Trondhjemite: Grey, medium-grained, foliated granodiorite to tonalite
- INTRUSIVE CONTACT**
- Nepheeline Syenite Suite Intrusive Rocks (<1290 >1250 Ma)<sup>e</sup>**
- 10** Alkalic Syenite: Foliated to gneissic, leucocratic potassium-feldspar-bearing alkali syenite; with augen to laminated structure and a metamorphic fabric
- 9** Nepheeline Syenite: Foliated to gneissic, potassium feldspar-nepheeline syenite and alkali-nepheeline syenite, with augen to laminated structure and a metamorphic fabric
- 8** Anorthosite: Augen-textured to gneissic, gabbroic anorthosite, minor anorthositic gabbro
- INTRUSIVE CONTACT**
- GRENVILLE SUPERGROUP**
- METASEDIMENTARY ROCKS**
- 7** Calcitic Marble: Generally massive, grey to white-weathering, medium- to coarse-grained, calcitic marble; near the boundary with the Central Gneiss Belt, includes areas of marble tectonic breccia containing calc-silicate (unit 5f), amphibolite (unit 6a), and met-syenite (unit 5) fragments
- 6** Amphibole-Rich and Micaceous Metasedimentary Rocks (metamorphosed calcareous mudstone and sandstone): locally containing phases rich in potassic feldspar, biotite, scapolite, epidote, carbonate, pyrite and iron-titanium oxide minerals; thin intercalated units of siliceous marble common
- 6b Garnet-biotite-plagioclase-quartz gneiss and schist (intercalated, thinly bedded, siliceous and calcareous mudstone), locally containing phases rich in one or more of garnet, sillimanite, muscovite, scapolite, amphibole, carbonate, iron-titanium oxide minerals, and pyrite
- 6c Sillimanite-garnet-biotite orthoamphibole gneiss (Horeau Lake gneiss)
- 5** Quartz-Rich and Felsic Metasedimentary Rocks: Biotite-plagioclase-quartz gneiss (metasedimentary); commonly rusty weathering; with minor quartz-rich (metasiltstone) horizons
- FAULTED CONTACT?**
- CENTRAL GNEISS BELT (units 1 to 4)<sup>f</sup>**
- 4** Felsic Orthogneiss
- 4a Pink, medium- to coarse-grained, foliated to gneissic, monzogranite to syenogranite
- 4b Pink, medium- to coarse-grained, gneissic, amphibole monzogranite; locally containing zones rich in amphibolite and gneissic tonalite xenoliths
- 4c Irregularly layered to straight gneiss derived from unit 4a or 4b
- INTRUSIVE CONTACT**
- 3** Intermediate to Felsic Orthogneiss
- 3a Medium- to coarse-grained, foliated to gneissic, tonalite and monzogranite
- 3b Medium- to coarse-grained, foliated to gneissic, amphibole monzonite to syenite
- 3c Irregularly layered to straight gneiss derived from unit 3a or 3b
- 3d Flattened gneiss derived from feldspar-magmatic granodiorite

- SYMBOLS**
- Geological contact, interpreted
- Fault, unknown generation, interpreted
- Lineament
- Limit of detailed mapping
- Densate areas of extensive drift through which geological contacts cannot be reliably extrapolated
- Compositional layering and/or parallel tectonic foliation; unknown generation (inset, magnitude of dip uncertain)
- Location of isotopic age determination
- Lineation, with plunge
- Isograd, orthopyroxene-in
- Anticline, unknown generation, interpreted (trend only)
- Syncline, unknown generation, interpreted (trend only)
- Mineral occurrence (number corresponds with "Felsic Producer" list)

- ABBREVIATIONS**
- cdm = corundum
- ch = chalcophyllite
- hd = hedenbergite
- grt = garnet
- mag = magnetite
- mo = monzonite
- ne = nepheeline
- py = pyrite
- Th = Thonon
- U = Ulinium
- UJ = Ulinium (U-Pb date, in Ma)
- UJ = Ulinium (U-Pb date, in Ma)

- PAST PRODUCERS**
1. Craigmont Mine (cdm)
2. Manufacturers Corundum Company (Hoover Mountain corundum deposit) (cdm)

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