



STRATIGRAPHIC LEGEND

CAPE SMITH BELT

PALEOPROTEROZOIC

- Lac Esker Differentiated Ultramafic Suite (pPesk)**
  - pPesk1 Gabbro; may also contain volcanoclastic rocks and iron formation
- Bélanger Gabbroic Suite (pPbl)**
  - pPbl1 Diabase, microgabbro
- Chukotat Group (pPch)**
  - pPch1 Plagioclase basalt; may also include gabbro
  - pPch2 Pyroxene basalt; may also include plagioclase basalt, pyroxenite and gabbro
  - pPch3 Olivine basalt; may also include pyroxene basalt, plagioclase basalt, pyroxenite and gabbro
- Povungnituk Group**
  - Nuvilic Formation (pPnu)**
    - pPnu1 Sandstone, siltstone
  - Beauparlant Formation (pPbe)**
    - pPbe1 Basalt; may also include phyllite, volcanoclastic rocks, iron formation, gabbro and microgabbro
- Lamarche Group**
  - Nituk Formation (pPni)**
    - pPni1 Phyllite; may also include basalt, siltstone, sandstone, conglomerate, limestone, dolomitic limestone, iron formation and microgabbro
    - pPni2 Siltstone, sandstone and conglomerate; may also include phyllite, dolomitic limestone, iron formation and microgabbro
  - Kuuvvaluk Formation (pPkuv)**
    - pPkuv1 Iron formation

SUPERIOR PROVINCE

PROTEROZOIC

- Irsuaq River Dykes**
  - pPir1 Gabbro dykes, homogeneous, massive, ophitic texture, medium to coarse-grained; dark green; broadly trending N-S to NNE-SSW with parallel cleavage locally
- Payne River Dykes (K-Ar age of >2000 Ma, Fahrig et al., 1985)**
  - pPpy1 Diabase dykes, homogeneous, massive, magnetic, fine-grained to aphanitic, bluish grey in fresh surface, greenish to blackish brown in weathered surface, broadly trending NW-SE
- Klotz Dykes (U/Pb age of ~2209 Ma, Buchan et al., 1998)**
  - pPkl1 Diabase and gabbro dykes, homogeneous, massive, ophitic texture, medium to coarse-grained; medium green; broadly trending ESE-WNW to E-W

ARCHEAN

- Bylot Suite (Abyl)**
  - Abyl1 Intermediate to mafic rocks; with biotite + chlorite or with clinopyroxene + hornblende + biotite, heterogeneous, migmatized and injected with tonalitic to granitic mobilizate
  - Abyl2 Biotite ± hornblende diatexite with granitic to granodioritic leucosome, heterogeneous, heterogranular, saccharoidal texture, gneissic aspect; contains amphibole inclusions, paragneiss restites, biotite aggregates and schlieren, wavy foliation; pinkish grey
  - Abyl3 Biotite ± hornblende diatexite with tonalitic to trondhjemitic leucosome, heterogranular, saccharoidal texture, gneissic aspect; contains amphibole inclusions, paragneiss restites, biotite aggregates and schlieren, wavy foliation, medium grey (U-Pb zircon ages of crystallization of 2725.5 ± 1.6 Ma and 2737 ± 13 Ma)
- Pingou Suite (Apin)**
  - Apin3 Diorite; with biotite + magnetite + titanite ± hornblende, granular, fine to medium-grained
  - Apin4 Quartz syenite; with biotite, leucocratic, strongly lineated (L-tectonite)

- Apin3 Granodiorite; with biotite ± hornblende ± blue quartz, leucocratic, homogeneous, massive to foliated, medium to coarse-grained; pinkish white; contains mafic to ultramafic enclaves
  - Apin2 Granite; with biotite ± hornblende ± blue quartz, homogeneous, massive to foliated, medium to coarse-grained; equigranular; pinkish white; contains mafic to ultramafic enclaves
  - Apin1 Monzogranite, granodiorite to quartz monzonite with microcline porphyroblasts (unsubdivided); with biotite ± hornblende ± clinopyroxene ± blue quartz, foliated to mylonitic, porphyroblastic to megacrystic; microcline crystals up to 7 cm long; pinkish to reddish grey (U-Pb zircon ages of crystallization of 2727.0 ± 2.1 Ma and 2725.2 ± 4.4 Ma)
- Qilalugalik Suite (Aqil)**
- Aqil3 Enderbite; with biotite + orthopyroxene ± clinopyroxene ± hornblende, leucocratic to mesocratic, massive to strongly foliated, medium-grained; equigranular; golden brown; also includes epidote and charnockite (U-Pb zircon age of crystallization of 2731.6 ± 1.9 Ma)
  - Aqil2a Mangerite; with biotite + orthopyroxene + K-feldspar ± clinopyroxene ± hornblende, massive to foliated, medium to coarse-grained, locally porphyritic
  - Aqil2b Orthopyroxene-bearing diorite; with hornblende + orthopyroxene ± clinopyroxene, homogeneous, foliated, fine to medium-grained; greenish to dark grey-blue
  - Aqil2c Gabbro-norite to leuconorite (unsubdivided); with biotite + orthopyroxene ± hornblende, homogeneous, massive to foliated, medium to fine-grained; also includes minor proportions of ultramafic rocks; dark green to greenish brown
  - Aqil2d Ultramafic plutonic rocks (unsubdivided); may include pyroxenite, peridotite, dunite and hornblende, in massive lens-shaped bodies; dark green to black; buff brown in weathered surface
- La Chevrotière Suite (Alev)**
- Alev3 Granodiorite; with biotite ± hornblende, leucocratic, homogeneous, massive to foliated, medium to coarse-grained, equigranular; reddish to whitish grey, contains granitic phases in diffuse contact
  - Alev2 Granite; with biotite ± hornblende, homogeneous, massive to foliated, medium to coarse-grained, equigranular; pinkish white
  - Alev1 Porphyritic monzogranite, granodiorite to quartz monzonite (unsubdivided); with biotite ± hornblende ± clinopyroxene, homogeneous, foliated, porphyritic to megacrystic with K-feldspar phenocrysts up to 5 cm long; pinkish to reddish grey
- Rochefort Suite (Arot)**
- Arot3 Granitized heterogeneous tonalite; with biotite ± hornblende, leucocratic, foliated to weakly foliated, fine to medium-grained; contains injections of hololeucocratic granite and granitic phases in diffuse contact; light to pinkish grey
  - Arot2 Heterogeneous tonalite; with hornblende + biotite; contains abundant enclaves of mafic gneiss and amphibolite (assimilation of metabasalts); also includes homogeneous and foliated tonalite, contains granitic injections; pinkish grey
  - Arot1 Homogeneous tonalite to trondhjemite (unsubdivided); with biotite ± hornblende, leucocratic to mesocratic, homogeneous, massive, foliated or banded; may contain intermediate to mafic enclaves (U-Pb zircon ages of crystallization of 2766 ± 2 Ma, 2807.2 ± 9.2 Ma and 2829.6 ± 4.6 Ma)
- Couture Suite**
- Acot1 Anorthositic anorthositic gabbro; with hornblende ± chlorite ± biotite ± muscovite, foliated, brecciated aspect
- Mézard Complex (Amez)**
- Amez2 Biotite-garnet diatexite (unsubdivided); with biotite + garnet ± cordierite ± sillimanite; contains 25 to 80% felsic leucosome with garnet ± orthopyroxene porphyroblasts; protolith either heterogeneous leucocratic to mesocratic and coarse-grained (psammite) or homogeneous, melanocratic and fine-grained (metapelite); also includes iron formation horizons; rusty brown (U-Pb zircon age of crystallization for the leucosome of 2668 ± 22 Ma)
  - Amez3a Granitic pegmatite; with biotite ± muscovite, heterogranular, hololeucocratic; white to light pink
  - Amez3b Mafic metavolcanic rocks; with hornblende ± biotite ± clinopyroxene ± orthopyroxene, foliated or granoblastic; contains < 20% felsic leucosome with clinopyroxene ± orthopyroxene; locally includes felsic rocks and felsic tuffs interdigitated with metasedimentary rocks

- Duquet Belt (Aduq)**
  - Aduq2 Paragneiss; with biotite + garnet ± cordierite ± sillimanite ± andalusite; contains 10 to 75% felsic leucosome; may also include conglomerate, marble and iron formation horizons
  - Aduq3a Granitic pegmatite; with biotite ± muscovite, heterogranular, hololeucocratic; whitish to light pink
  - Aduq3b Mafic metavolcanic rocks; with hornblende, foliated; locally includes horizons of rhyolitic tuffs and ultramafic rocks
- Povungnituk Complex (Apov)**
  - Apov2 Paragneiss; with garnet + biotite; may also include calc-silicate rocks and iron formation horizons
  - Apov1 Mafic metavolcanic rocks; with hornblende ± clinopyroxene ± orthopyroxene ± biotite, foliated to granoblastic; contains < 10% felsic leucosome with clinopyroxene ± orthopyroxene; may include layers of ultramafic rocks, volcanoclastic rocks and paragneiss

LITHOLOGICAL LEGEND

- ARCHEAN**
  - V1▼ Felsic volcanoclastic rocks: aphanitic, crystal and lapilli (less than 3 cm) tuffs, locally laminated, sericite schist, contains hornblende

Map RG 2004-05-C001 is an image produced with digital data extracted from Québec's geomineral information system (SIGEOM) as of November 2005.  
 Geomatics products corresponding to NTS sheet 35C are available via the following website: [www.mrn.gouv.qc.ca/produits-services/mines.jsp](http://www.mrn.gouv.qc.ca/produits-services/mines.jsp) under the tab **e-sigeom atlas**.  
 This final map shows the results of a geological survey conducted in the Superior Province in 2002 by the following geologists: Alain Berclaz and Charles Maurice (team leaders), Valérie Bécu, Annie Lavoie, François Lecarré, Olivier Rabreau, Mélanie St-Arnaud. Ministère des Ressources naturelles et de la Faune.  
 It also includes a compilation of data derived from publications cited in reference. Explanatory notes for this map are provided in publication number RG 2004-05.

**References**  
 : Stevenson, J.M., 1968, GSC Memoir 356, map 1229A  
 : Togola, N., 1992, ET 91-07  
**Compilation and interpretation**  
 : Alain Berclaz, Charles Maurice and Mélanie St-Arnaud  
**Technical assistance**  
 : Patrick Olivier, David Bédelle and Gertrude Janssen  
 We suggest references to this map be made in the following form:  
 Berclaz, A., Maurice, C., St-Arnaud, M., 2005 - Geology 1:250,000, 35C - POVUNGNITUK. Ministère des Ressources naturelles et de la Faune, Québec, map RG 2004-05-C001.

POVUNGNITUK  
35C

35 E	35 F	35 G
35 D	35 C	35 B
34 M	34 N	34 O

Geoscience compilation - Geology 1:250,000  
 Codes and symbols used for this map comply with the general legend for geological maps (publication MB 96-28)



