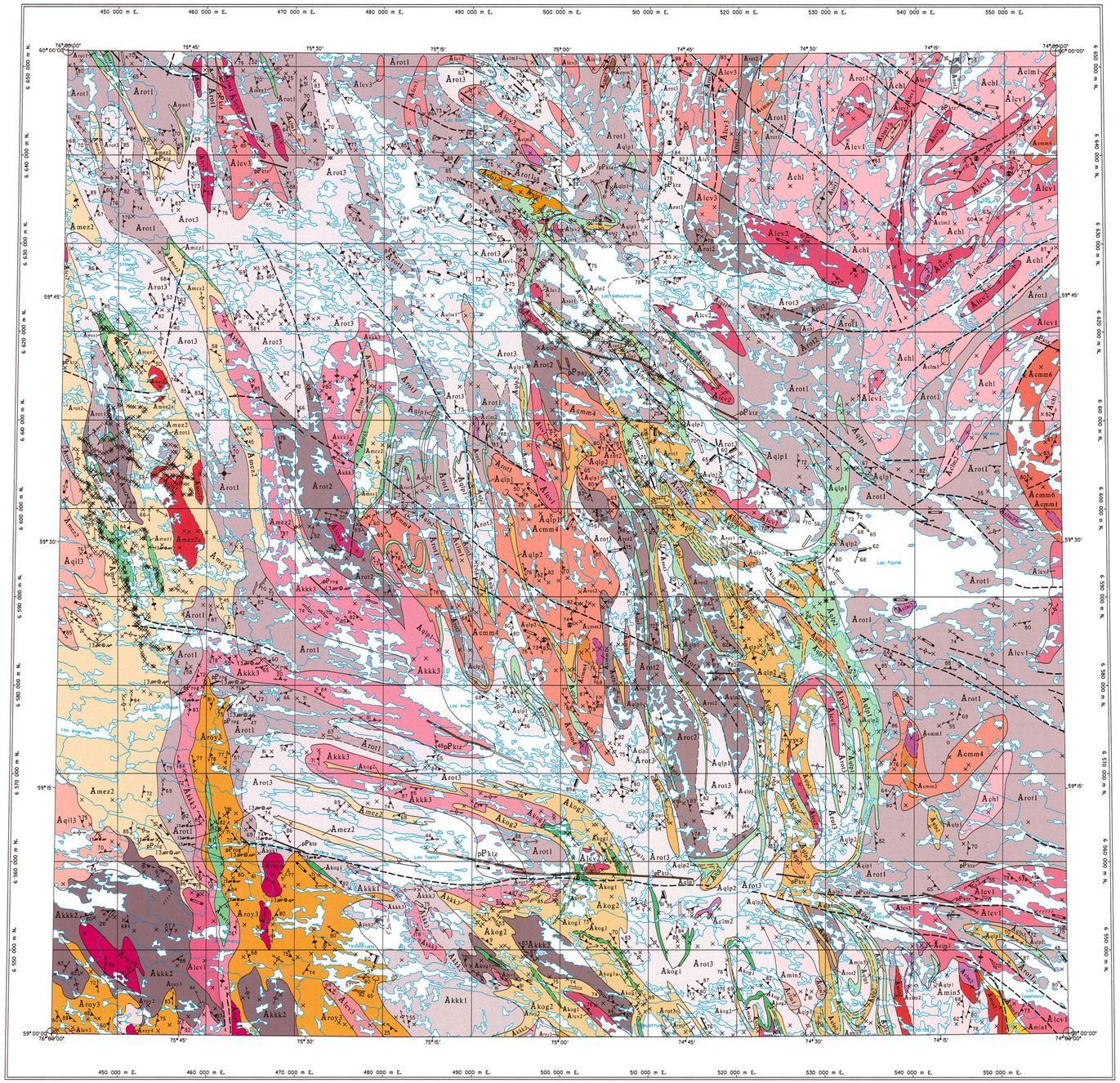
Ressources naturelles et Faune
Québec

RG 2003-05-C001



STRATIGRAPHIC LEGEND

PALEOPROTEROZOIC

Kogaluc River Dykes

- pProg — Mafic dyke, heterogeneous, brecciated, aphanitic matrix, contains abundant quartzofeldspathic xenoliths and rounded vesicles; dark brown to rusty brown

Payne River Dykes (K/Ar age of ~1875-1790 Ma, Fahrig et al., 1985)

- pPpay — Diabase dyke, homogeneous, massive, strongly magnetic, fine-grained to aphanitic, bluish grey in fresh surface; greenish brown in weathered surface

Klotz Dykes (U/Pb age of ~2209 Ma, Buchan et al., 1998)

- pPktz — Gabbro dyke, homogeneous, massive, ophitic texture, medium to coarse-grained; light medium green

ARCHEAN

Lac Taslat Syenite (Atst)

- Atst — Nepheline syenite : also includes aegirine-augite essexite (U/Pb zircon age of 2643.4 ±7.6 Ma)

Lac Minto Suite (Amin)

- Amin5 — Enderbite : foliated, leucocratic, medium to coarse-grained, also includes coarse-grained opdalite and charnockite, contains 5-25 % enclaves of mafic rock, diorite and paragneiss, biotite schlieren; golden brown
- Amin2 — Opdalite and mangerite (unsubdivided) : with 10-40 % biotite + orthopyroxene + clinopyroxene ± hornblende ± magnetite, leucocratic to mesocratic, foliated, medium to coarse-grained, generally homogeneous, may contain up to 25 % enclaves of diorite and paragneiss; light grey-brown
- Amin1 — Biotite-orthopyroxene diatexite : granitic to locally tonalitic composition, with biotite + orthopyroxene ± garnet ± clinopyroxene, foliated, heterogeneous, heterogranular, contains enclaves of paragneiss, diorite and gabbronorite, biotite schlieren; greenish brown

Le Roy Complex (Aroy)

- Aroy4 — Granite : contains less than 20 % biotite ± epidote ± hornblende ± clinopyroxene, foliated to massive, leucocratic to hololeucocratic, medium to coarse-grained, locally contains pegmatitic phases and biotite schlieren; light pink
- Aroy3 — Garnet-cordierite-sillimanite diatexite : granitic to locally tonalitic neosome, contains enclaves and restites of biotite-garnet-cordierite-sillimanite paragneiss, heterogeneous, wavy foliation, locally gneissic, heterogranular, biotite schlieren and aggregates; yellowish grey to rusty brown (U/Pb zircon age of 2698 ±1 Ma)
- Aroy2 — Heterogeneous enderbite : foliated, contains 10-20 % coarse-grained opdalitic mobilizate and 20-50 % medium-grained granodiorite, as well as mafic and intermediate enclaves; golden brown

Qilalugalik Suite (Aqil)

- Aqil3 — Heterogeneous enderbite : foliated, leucocratic, medium-grained, contains abundant enclaves of diorite and locally of paragneiss; includes granodiorite and local mafic mineral schlieren; golden brown

MacMahon Suite (Acmm)

- Acmm6 — Opdalite, mangerite and charnockite (unsubdivided) : with 10-30 % biotite + orthopyroxene ± clinopyroxene, massive to foliated, medium to coarse-grained, commonly contains K-feldspar phenocrysts (up to 2 cm long); yellowish brown (U/Pb zircon age of 2717 ±10 Ma)
- Acmm4 — Orthopyroxene-rich enderbite : with 5-35 % biotite + orthopyroxene ± clinopyroxene ± hornblende ± magnetite, leucocratic to mesocratic, massive to strongly foliated, medium to fine-grained, equigranular; golden brown (U/Pb zircon age of 2728.6 ±6.5 Ma)
- Acmm3 — Orthopyroxene-bearing diorite to monzodiorite (unsubdivided) : with hornblende + orthopyroxene + clinopyroxene + biotite + magnetite, homogeneous, foliated, fine to medium-grained; greenish grey to dark grey-blue
- Acmm2 — Gabbronorite to leuconorite (unsubdivided) : with biotite + hornblende + magnetite, melanocratic to leucocratic, homogeneous, massive to foliated, medium to fine-grained, also includes pyroxenite and peridotite; dark green to greenish brown (U/Pb zircon age of 2723 ±2 Ma)
- Acmm1 — Ultramafic plutonic rock (unsubdivided) : includes pyroxenite, peridotite, dunite, hornblendite and serpentinite, occurring in lenticular bodies; dark green to black in fresh surface, buff brown in weathered surface

La Chevrotière Suite (Alcv)

- Alcv3 — Granodiorite : with biotite ± magnetite ± hornblende ± epidote ± titanite, leucocratic, homogeneous, massive to foliated, medium to coarse-grained, weakly magnetic; reddish to whitish grey
- Alcv2 — Granite : with biotite ± magnetite ± hornblende ± allanite, homogeneous, foliated to massive, coarse-grained, equigranular; pinkish white (U/Pb zircon age of 2723 ±2 Ma)
- Alcv1 — Porphyritic monzogranite, granodiorite to quartz monzonite (unsubdivided) : with biotite ± hornblende ± clinopyroxene + titanite + magnetite, homogeneous, foliated, porphyritic to megaphyric, with K-feldspar phenocrysts up to 10 cm long; pink to reddish grey (U/Pb zircon age of 2732 +4/-2 Ma)

Châtelain Suite (Achl)

- Achl — Granitized granodiorite to tonalite (unsubdivided) : with hornblende + clinopyroxene ± biotite ± magnetite, homogeneous, weakly foliated, medium-grained, burgundy plagioclase, clinopyroxene cores in hornblende grains, contains enclaves of pyroxenite, gabbro and diorite; purplish to reddish grey (U/Pb zircon ages of 2760.3 ±4.3 Ma and 2723 ±16 Ma)

Lac Calme Suite (Aclm)

- Aclm2 — Ultramafic rocks (unsubdivided) : includes pyroxenite, websterite, hornblendite, melanocratic to holomelanocratic, homogeneous, massive to foliated; dark green to dark brown, shows evidence of local brecciation by mafic rocks
- Aclm1 — Mafic rocks (unsubdivided) : includes diorite to quartz diorite and minor gabbro, with hornblende + biotite + magnetite ± clinopyroxene, mesocratic to melanocratic, homogeneous, granoblastic, medium-grained, massive; medium grey

Kaklattuq Suite (Akkk)

- Akkk3 — Heterogeneous tonalite : with biotite + hornblende + magnetite ± clinopyroxene, heterogeneous, injected and interdigitated with granodiorite and granite, wavy foliation, gneissic to diatexitic aspect, contains enclaves of paragneiss, mafic to intermediate gneiss, gabbronorite, ultramafic rock and iron formation; dark grey to pink
- Akkk2 — Granitized tonalite : with biotite + hornblende + epidote ± titanite ± allanite, leucocratic, foliated, fine to medium-grained, contains injections of hololeucocratic granite and granitic pegmatite, derived from the granitization of Akkk1; light grey to pinkish grey
- Akkk1 — Homogeneous tonalite : with biotite + hornblende + epidote ± titanite ± allanite, leucocratic, homogeneous, foliated, fine to medium-grained; light grey to dark grey (U/Pb zircon age of 2740 ±4 Ma)

Rochefort Suite (Arot)

- Arot3 — Granitized tonalite : with biotite ± hornblende ± epidote ± titanite ± allanite, leucocratic, foliated to weakly foliated, fine to medium-grained, contains injections of hololeucocratic granite and granitic phases in diffuse contact; light grey to pinkish grey
- Arot2 — Heterogeneous tonalite : with hornblende + biotite ± epidote ± titanite ± allanite, contains abundant enclaves of mafic gneiss and amphibolite (assimilation of metabasalt); also includes homogeneous and foliated tonalite, contains granitic injections; pinkish grey
- Arot1 — Homogeneous tonalite to tronchjemite (unsubdivided) : with 5-25 % biotite ± hornblende ± magnetite ± epidote ± allanite, leucocratic to mesocratic, homogeneous, massive to banded, may contain intermediate to mafic enclaves; mesocratic medium-grained facies; light grey to dark grey (U/Pb zircon ages of 2848 ± 11 Ma and 2769 +6/-4 Ma); leucocratic coarse-grained facies; greyish white (U/Pb zircon ages of 2810 ± 2.2 Ma and 2757.7 ±4.3 Ma)

Mézard Complex (Amez)

- Amez2 — Diatexitic quartzofeldspathic paragneiss (unsubdivided) : quartz + plagioclase + biotite + garnet ± cordierite ± sillimanite ± staurolite; contains 25 to 75 % quartzofeldspathic leucosome with garnet ± orthopyroxene porphyroblasts; heterogeneous, leucocratic to mesocratic and coarse-grained (metapelite), or more rarely, homogeneous, melanocratic and fine-grained (psammite); also includes iron formation; rusty brown
  - Amez2a — Pegmatitic granite with biotite + tourmaline ± muscovite ± garnet, heterogranular, hololeucocratic; white to light pink
- Amez1 — Metavolcanic rocks (undifferentiated) : mafic to locally felsic metavolcanic rocks, including mafic gneiss, amphibolite, mafic schist, rhyodacitic tuff; interdigitated with metasedimentary rocks

Kogaluc Complex (Akog)

- Akog2 — Metasedimentary rocks : sandstone, siltstone, quartzite, argillite, biotite paragneiss, metamorphosed to the amphibolite and granulite facies, locally includes silicate-facies iron formation
- Akog1 — Metavolcanic rocks (undifferentiated) : mafic, intermediate and felsic volcanic rocks, including mafic gneiss, amphibolite, mafic schist, basalt, mafic and intermediate tuff, pillowed and plagioclase-phyric andesite, dioritic sill, rhyolite, rhyolitic quartz-eye tuff, interdigitated with metasedimentary rocks
  - Akog1a — Intermediate to felsic metavolcanic rocks (undifferentiated) : including intermediate tuff, pillowed and plagioclase-phyric andesite, rhyolite, rhyolitic quartz-eye tuff

Qalluviartuuq-Payne Complex (Aqlp)

- Aqlp3 — Diorite : hornblende + plagioclase + quartz ± biotite ± clinopyroxene ± orthopyroxene, homogeneous, foliated, medium-grained, locally plagioclase-phyric, occurring as doleritic sills or dykes associated with mafic to felsic volcanic rocks; may also correspond to meta-andesites; dark grey
- Aqlp2 — Migmatitic quartzofeldspathic paragneiss (unsubdivided) : quartz + plagioclase + biotite + garnet ± cordierite ± sillimanite ± andalusite; contains 5 to 50 % quartzofeldspathic leucosome with garnet porphyroblasts; heterogeneous, leucocratic to mesocratic and coarse-grained (metapelite) or more rarely, homogeneous, melanocratic and fine-grained (psammite); also includes iron formation; rusty brown
  - Aqlp2a — Conglomerate (unsubdivided) : polymictic conglomerate with clasts and blocks of tonalite and volcanic rock, locally monomictic conglomerate with tonalite blocks, sandy-pelitic matrix, also includes sandstone and metapelite beds, foliated to mylonitic
- Aqlp1 — Metavolcanic rocks (undifferentiated) : essentially mafic to intermediate volcanic rocks with hornblende + plagioclase ± clinopyroxene ± orthopyroxene ± garnet, foliated to gneissic, fine to medium-grained, including mafic gneiss, amphibolite, mafic schist, basalt, mafic and intermediate tuff, pillowed and plagioclase-phyric andesite, dioritic horizon; also includes rhyodacite, rhyodacitic quartz-eye tuff, interdigitated with sedimentary rocks
  - Aqlp1b — Ultramafic metavolcanic rocks : with amphibole (actinolite-tremolite-cummingtonite) + serpentine + chlorite + leucoxene + magnetite + spinel, homogeneous, weakly foliated, medium-grained; dark green to black in fresh surface; buff brown in weathered surface
  - Aqlp1c — Gabbro to gabbroic anorthosite : with plagioclase ± hornblende ± orthopyroxene, leucocratic, foliated to mylonitic, granular, coarse-grained to glomerophyric, hosts anthophyllite-cordierite alteration zones and disseminated sulphide zones; white (U/Pb zircon age of 2851.2 ±4.2 Ma)

Map RG 2003-05-C001 is an image produced with digital data extracted from Québec's geomining information system (SIGEOM) as of august 2005.

Geomatics products corresponding to NTS sheet 34O are available via the following website: www.mrn.gouv.qc.ca/produits-services/mines.jsp under the tab e-sigeom atlas.

The high density of data on the map makes it impossible to reproduce outcrops examined by Percival, J.A., Skulski, T., Card, K.D., Lin, S., GSC, 1995, Open File 3112, cited in reference. These outcrops do appear on the SIGEOM map however.

This final map shows the results of a geological survey conducted in 2001 by the following geologists: Alain Berclaz (team leader), Charles Maurice, Chantal Bilodeau (ministère des Ressources naturelles et de la Faune), Julien Davy, Karine Duguay, François Leclerc, Ehouman N'Dha (UQAM), Christine Hogue (U. Laval) and a compilation of data derived from publications cited in reference. Explanatory notes for this map are provided in publication number RG 2003-05.

References
: Cattalani, S., Heidema, J., 1993, GM 52254
Francoeur, G., Chapdelaine, M., 1999, GM 56437
Grosl, V., 1993, GM 52252
Percival, J.A., Skulski, T., Card, K.D., Lin, S., GSC, 1995, Open File 3112

Compilation and interpretation : Alain Berclaz, Charles Maurice

Technical assistance : Patrick Olivier, Christian Garneau, Pascale Martel, Nelson Leblond

We suggest reference to this map be made in the following form:
Berclaz, A., Maurice, C., Sharma, K.N.M., 2005 - Geology 1:250,000 - LAC ANUC. Ministère des Ressources naturelles et de la Faune, Québec, map RG 2003-05-C001.

LAC ANUC
34O

35 C	35 B	35 A
34 N	34 O	34 P
34 K	34 J	34 I

RG 2003-05-C001

Canada
Québec

SIGÉOM was initially developed within the scope of the Canada-Québec Mineral Development Agreement (1992-1998).

Geoscience compilation - Geology 1:250 000

Geological map

SCALE 1:250 000

kilometre 0 5,0 10 15 20 25 30 kilometres

34O - LAC ANUC

Projection Mercator transverse universelle (UTM), fuseaus 18
angle du quadrillage par rapport au nord réel: 0°0' vers l'est
ellipsoïde de référence GRS80
système de référence géodésique: NAD83

repère indiquant la position du feuillet dans le réseau géodésique NAD27.

RG 2003-05-C001
Date of compilation : august 2005

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)