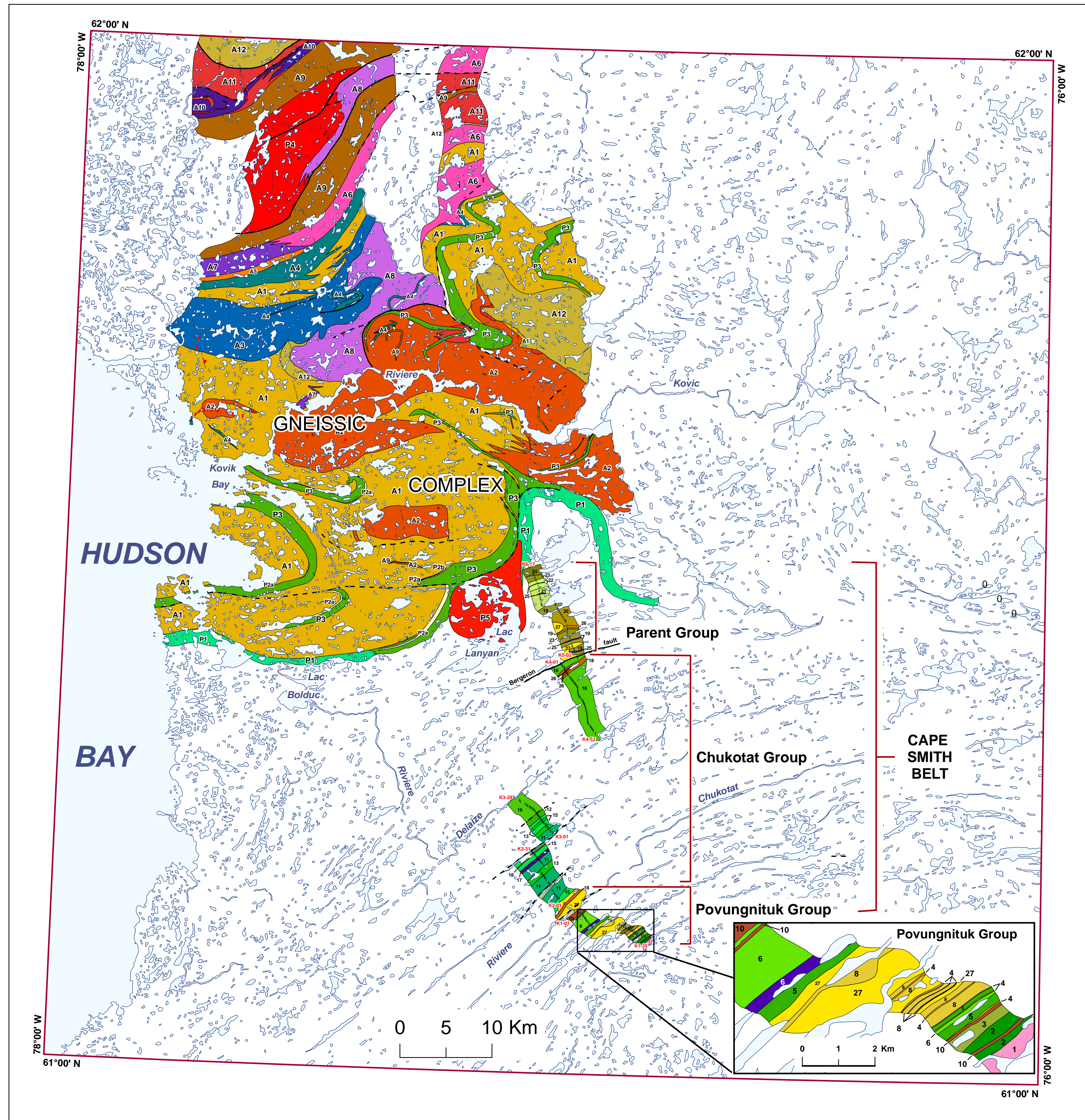




GEOLOGY OF PART OF KOVİK BAY MAP AREA (NTS 35-F), GSC OPEN FILE 7846

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LEGEND

GNEISSIC COMPLEX NORTH OF CAPE SMITH BELT

PROTEROZOIC

- P6 Late dolerite dykes.
- P5 Late granite (undeformed).
- P4 Pegmatite dykes (undeformed).
- P3 Metabasalt, probably Povungnituk. Forms northern Cape Smith Belt boundary and infolds in the gneiss complex.
- P2a P2b Metasediment, probably Povungnituk, mostly biotitic metapelite, in places garnetiferous: a) minor metaquartzite, particularly adjoining underlying basement gneiss and b) iron-formation.
- P1 Cape Smith Belt rocks undifferentiated.

ARCHEAN AND/OR PROTEROZOIC

- A13 Migmatite, mostly amphibolite blocks in a highly deformed quartz-feldspar-biotite matrix.
 - A12 Paragneiss. Mostly biotitic and garnetiferous quartzofeldspathic, highly foliated gneiss, mafic to leucocratic in composition. In places cut by granitic veins and seams.
 - A11 Potash feldspar megacrystic quartzofeldspathic gneiss, augen gneiss. In places interlayered with brownish-weathering metagabbro.
 - A10 Mostly foliated metagabbro ranging to metadolerite and amphibolite; commonly yellow-brown weathering and locally garnetiferous.
 - A9 Undivided gneiss, partly supercrustal rocks. Quartzite with shaly interbeds, thick- to thin-layered quartz-feldspar-biotite gneiss, commonly garnetiferous, with interlayers of biotitic and amphibolitic seams.
 - A8 Intermediate gneiss. Mainly feldspar-biotite and feldspar-hornblende (clinopyroxene) gneiss, generally low in quartz.
 - A7 Metadiorite to metagabbro, mostly highly mafic ranging to coarse amphibolite. Hornblende-rich, lesser clinopyroxene and biotite. Generally highly foliated.
 - A6 Intermediate granitoid gneiss with generally 15 to 25% biotite and hornblende. Layered in places with alternating mafic and quartzofeldspathic layers.
 - A5 Biotite-rich, quartz-feldspar gneiss with significant potash feldspar locally.
 - A4 Mainly amphibolitic gneiss, garnetiferous in places, commonly with interlayered quartzofeldspathic and/or biotitic paragneiss.
 - A3 Mixed granodioritic and amphibolitic gneiss, commonly migmatitic, and garnetiferous in many places. Lit par lit structures.
 - A2 Leucocratic granitoid gneiss, probably a variant of the grey gneiss (unit A1). Generally pink in colour and with less than 15% mafic minerals, mostly biotite. Rare garnet.
 - A1 Leucocratic grey gneiss. Generally leucocratic, moderately foliated quartz-feldspar-biotite gneiss ranging to hornblende in places and commonly garnetiferous. Potash feldspar, varying from minor to major, usually present. Amphibolitic interlayers occur throughout the outcrop region.
- Fault, interpreted
— Fault, defined
● Station
● Station with geochemistry; numbers mark traverse start and terminus
— Unconformity

Projection: NAD83 UTM18N

KOVİK SECTION, CAPE SMITH BELT

PLEISTOCENE

- 27 Overburden

PALEOPROTEROZOIC

Parent Group

- 26 Dolerite / metadolerite.
- 25 Gabbro / metagabbro.
- 24 Hornblende-garnet schist.
- 23 Mixed metadolerite / metagabbro and schistose mafic volcanic rocks.
- 22 Hornblende - mica layered schists; in part metasediments.
- 21 Felsic to mafic lenticular schists ranging to fragmental volcanic rocks; felsic fragments in mafic matrix.
- 20 Mafic to felsic, garnet-bearing schists, ranging to block and lapilli tuff.
- 19 Block and lapilli tuff; mostly felsic blocks and particles in mafic matrix.

Chukotat Group

- 18 Dolerite sills
- 17 Mafic to ultramafic sills
- 16 Low Mg (<10% MgO), plagioclase- clinopyroxene-phyrlic, tholeiitic basalt.
- 15 Low Mg (<10% MgO), clinopyroxene- plagioclase-phyrlic, komatiitic basalt.
- 14 Low / medium Mg, clinopyroxene- olivine-phyrlic, komatiitic basalt.
- 13 Medium Mg (10-15% MgO), clinopyroxene- olivine-phyrlic, komatiitic basalt.
- 12 Medium / high Mg olivine- clinopyroxene-phyrlic, komatiitic basalt.
- 11 High Mg (> 15% MgO), olivine-phyrlic, komatiitic basalt.

Povungnituk Group

- 10 Dolerite sills
- 9 Mafic to ultramafic sills.
- 8 Interlayered dolerite sills and screens of shale or tuffaceous shale.
- 7 Grey to dark grey, highly cleaved, shale, siltstone, and greywacke.
- 6 Pillowed and massive tholeiitic basalt; may include some thin dolerite sills.
- 5 Massive tholeiitic basalt; possibly dolerite in part.
- 4 Grey to black shale or tuffaceous shale.
- 3 Sheared, finely layered mafic rock; tuff?
- 2 Mafic schist

ARCHEAN BASEMENT

- 1 Granitic gneiss

Recommended citation

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