

Relative ages of the following two granitoid units not defined

**Agb** Granite; white to buff, weakly foliated, medium grained, even grained; biotite- and muscovite-bearing  
**Agbp** - smaller bodies, typically biotite-muscovite pegmatite, locally with tourmaline

**Agao** Granite; granodioritic; heterogeneous, massive to weakly foliated; even grained; locally megacrystic with poikilic microcline, typically biotite-bearing but locally with hornblende or muscovite; inclusions common  
**Agap** - granite with abundant inclusions of orthogneiss (Aogn)  
**Agap** - granite with abundant inclusions of paragneiss (Apgn)

**Aa** Amphibolite; dark green; medium to coarse-grained; massive to weakly foliated; hornblende plagioclase metagabbro; local ultramafic layers to lenses present, locally (Aaa), intruded as sills into mafic volcanic rocks and probably contemporaneous with them; similar amphibolite dykes discordant or concordant to metasedimentary rocks (Aaa)

**YELLOWKNIFE SUPERGROUP**  
 The various map units of the Yellowknife Supergroup are defined on the basis of lithological composition. Where useful, named lithostratigraphic units have also been defined that may include all or only part of a particular map unit. For example, the Pelter Formation consists mainly of mafic volcanic rocks but lenses of similar mafic volcanic rocks also occur within the Keskarrah Formation. The change of colour tone of some of the rock units indicates a change in metamorphic grade with darker tones indicating higher metamorphic grade. Stratigraphic order is not necessarily implied in the following sequence of units

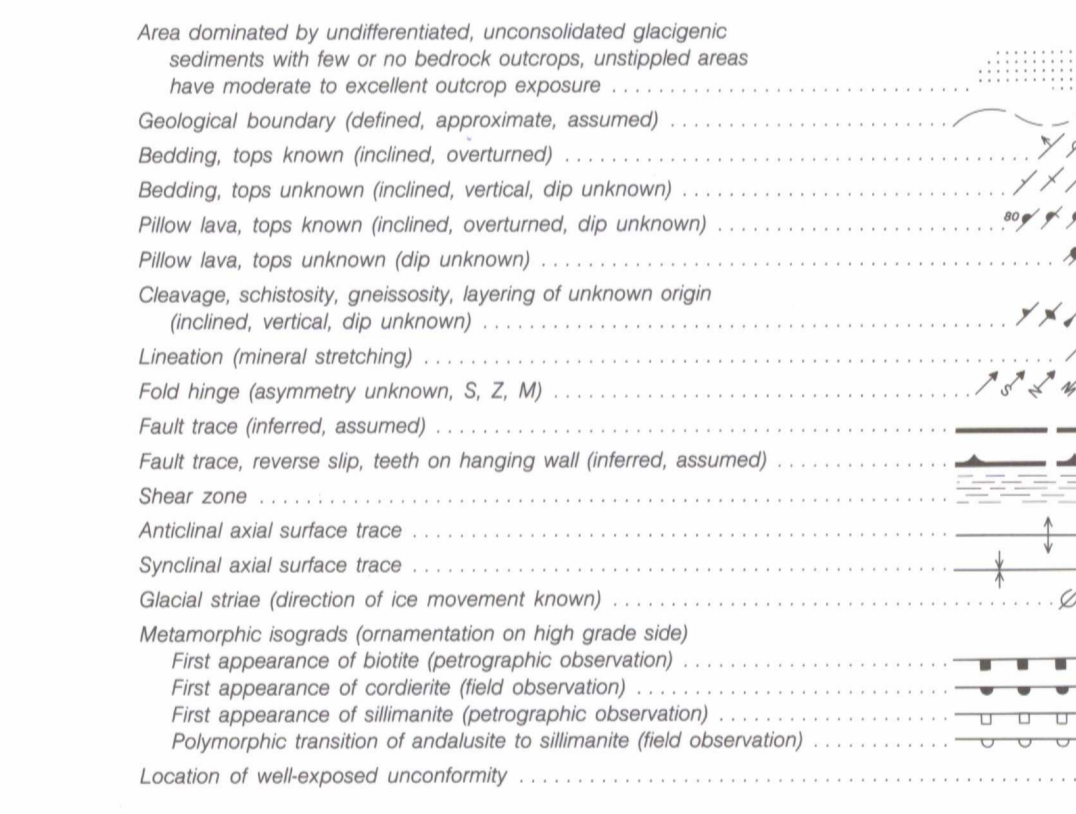
**COGEO GROUP**  
**Aic** ICHEN FORMATION: schist, psammite to pelitic; typically interlayered, coarsely porphyroblastic; contains various assemblages of quartz-biotite-muscovite-cordierite-andalusite-sillimanite-staurolite and retrogressive chlorite locally; similar to Conitwoyot Formation but does not contain iron-formation; derived from greywacke-mudstone turbidites and retrogressive chlorite locally; derived from greywacke-mudstone turbidites; metamorphic zones include chlorite (Aic), biotite (ACb), cordierite (ACc), and sillimanite (Aic)

**ACcl** CONITWOYOT FORMATION: greywacke-siltstone-mudstone to pelitic to psammite schist; typically interlayered; well preserved sedimentary features and structures at lower metamorphic grades; coarsely porphyroblastic at higher grades; formation characterized by occurrence of finely layered oxide, carbonate and silicate-sulphide facies iron-formation in mafic-siltstone units interbedded with classic sediments; thin dolomite to limestone layers present locally; pelitic rocks contain various assemblages of quartz-plagioclase-chlorite-muscovite-biotite-cordierite-andalusite-sillimanite-staurolite and retrogressive chlorite locally; derived from greywacke-mudstone turbidites; metamorphic zones include chlorite (ACcl), biotite (ACb), cordierite (ACc), and sillimanite (Aic)

**ARCHAIC**  
**As** Sandstone, conglomerate  
**Asa** Sandstone; white to buff, fine to medium-grained; quartz-rich; lithic; medium to large scale crossbedding; minor lenses and layers of fine grained conglomerate; local mafic to intermediate volcanic members  
**Aka** - KESKARRAH FORMATION: cherty sandstone  
**Ac** Conglomerate; granitoid and mafic volcanic clasts; clast composition proportion typically corresponds to composition of underlying units; local intermediate to mafic volcanic members  
**Akc** - KESKARRAH FORMATION: cherty conglomerate

**POINT LAKE GROUP**  
**Ab** Dolomite; orange to brown weathering; grey; medium to coarse-grained; layered to laminated; layering defined by volcanoclastic layers. Locally grades to volcanic breccias with carbonate matrix; mafic to intermediate volcanic rocks locally  
**Ab** BEAUPREANT FORMATION: basic volcanic rocks; white to buff to pale pink to yellow; rare quartz phenocrysts; many recrystallized fine volcanic rocks to breccias; moderately deformed  
**Ai** Intermediate volcanic rocks; grey to greenish grey; medium-fine grained; compositionally layered; varied proportion of mainly plagioclase and amphibole on fine to coarse scale to massive units; coarse breccias locally; clast size gradation locally preserved; coarser clasts tectonically elongated  
**Aii** SAMANDRE FORMATION  
**Am** Mafic volcanic rocks; mainly dark green; fine grained; massive to pillowed flows, rarely vesicular; minor varied sedimentary units from granitoid cobble conglomerate through shale to iron-formation  
**Arm** PELTER FORMATION  
**Apr** FERRAULT FORMATION: banded amphibolite, dark green to black; medium grained; thin compositional layering defined by varied proportion of mainly plagioclase and amphibole; in general strongly sheared to mylonitic texture; ultramafic layers to lenses present locally (Apra); possibly represents a mafic volcanoclastic unit

**AA** AUGUSTUS GRANITE: granite; white to pale pink to buff; medium grained; two-banded granites in the south but hypocrystic granites common in the south; contains ocellate biotite aggregates; weakly foliated to massive; weakly metamorphosed; locally abundant altered mafic dykes  
**Apgn** Gneiss, migmatitic paragneiss; cordierite-sillimanite-microcline-bearing interlayered psammite; to pelitic schist and granitoid leucosome with crosscutting xenoliths; phases that increase in abundance to the south; minor amphibole xenoliths  
**Aogn** Gneiss, heterogeneous orthogneiss; contains several generations ranging in composition from granites through granodiorites to tonalites; also includes amphibolite layers and xenoliths; some phases of unit younger than paragneiss unit Apgn; altered dykes present locally



Geology by H.H. Batock, 1964-1966; J.B. Henderson and R.M. Easton, 1976 (east of 113°15'); R.M. Easton et al., 1981 (Geology Division, Department of Indian and Northern Affairs, west of 113°10'); V.A. Jackson, 1981, 1982 (Geology Division, Department of Indian and Northern Affairs, north of 60°12', east of 113°15')

Compiled by J.B. Henderson, 1977, 1985  
 Geological cartography by the Geological Survey of Canada

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

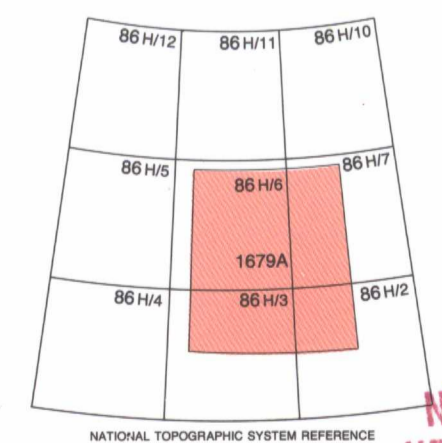
Base map assembled by the Geological Survey of Canada from maps published at the same scale by the Surveys and Mapping Branch in 1976

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Magnetic declination 1988, 30°11' East, decreasing 44.5' annually

Elevations in metres above mean sea level

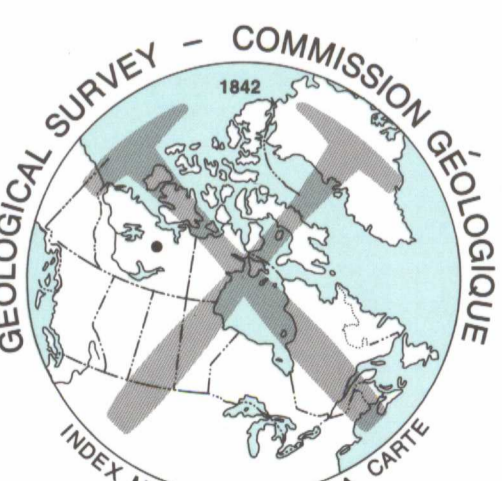
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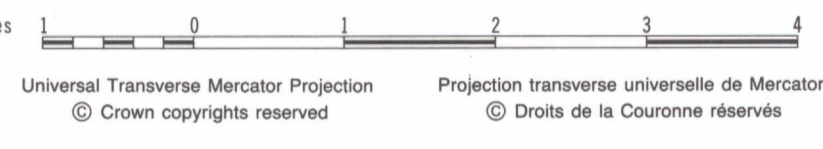
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MAP 1679A  
 GEOLOGY  
**KESKARRAH BAY AREA**  
 DISTRICT OF MACKENZIE  
 NORTHWEST TERRITORIES  
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