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GEOLOGICAL SURVEY OF CANADA / COMMISSION GÉOLOGIQUE DU CANADA

GEOLOGICAL TIME CHART

C E N T R A L C H U R C H I L L (H E A R N E) P R O V I N C E

NEJANILINI DOMAIN	EDEHON-KOGNAK DOMAIN	MAGUSE DOMAIN	KAMINURIAK DOMAIN	BAKER LAKE BASIN, MacQUOID LAKE DOMAIN AND AQXARNEQ GNEISSES
	RANGER SEAL LAKE, HYDE LAKE, THLEWIAZA RIVER AND RAY LAKE BELTS; HURWITZ BASIN	KAMINAK BELT; O'NEIL LAKE, KAMINAK LAKE, GILL LAKE, TURQUETIL LAKE, WALLACE RIVER, TAVANI AND IMILIJUUAQ PLUTONIC COMPLEXES; HURWITZ BASIN	MACKENZIE LAKE, RANKIN AND BARBOUR BAY BELTS; GIBSON LAKE PLUTONIC COMPLEX	ANDREWS LAKE AND MacQUOID LAKE - GIBSON LAKE BELTS; KRAMANITAUR, UVAUK AND DALY BAY COMPLEXES; HANBURY ISLAND AND BOUNDARY SHEAR ZONES
	K A Z A N U P L A N D			W A G E R P L A T E A U
GEILLINI RIVER	THA-ANNE, THLEWIAZA, MAGUSE AND McCONNELL RIVERS; ESKIMO POINT	MAGUSE AND KAMINAK LAKES, FERGUSON RIVER	KAMINURIAK, BANKS, PETER AND MELIADINE LAKES; CHESTERFIELD AND RANKIN INLETS, MARBLE ISLAND	KAZAN RIVER, MacQUOID LAKE / CHESTERFIELD INLET, DALY BAY
1	2	3	4	5

EONOTHEM / ERATHEM / SUBERATHEM / SYSTEM / EON / ERA / SUBERA / PERIOD / ISOTOPIC AGE (Ma)

PHAN — PALEOZOIC — ORD. 510 ± 10; CAMB. 543 ± 2

PROTEROZOIC — LATE — NEOPROTEROZOIC — HADRYNIAN — NEOHADRYNIAN — EDIACARAN 590 ± 20, 600; 700

PALEOHADRYNIAN 723 ± 3; 800; 900; 1000 ± 50

MIDDLE — MESOPROTEROZOIC — HELIKIAN — NEOHELIKIAN — LATE 1100 ± 10; MIDDLE 1200 ± 30; EARLY 1300; 1400 +30/-100

PALEOHELIKIAN — LATE 1500; 1525 ± 50; MIDDLE 1600; EARLY 1650 +5/-40; 1700

EARLY — PALEOPROTEROZOIC — APHEBIAN — NEOAPHEBIAN 1750 ± 50; 1800; 1860 +20/-10

MESOAPHEBIAN 1900; 2000; 2100; 2200

PALEOAPHEBIAN 2250 ± 30; 2300; 2400; 2500 ± 10

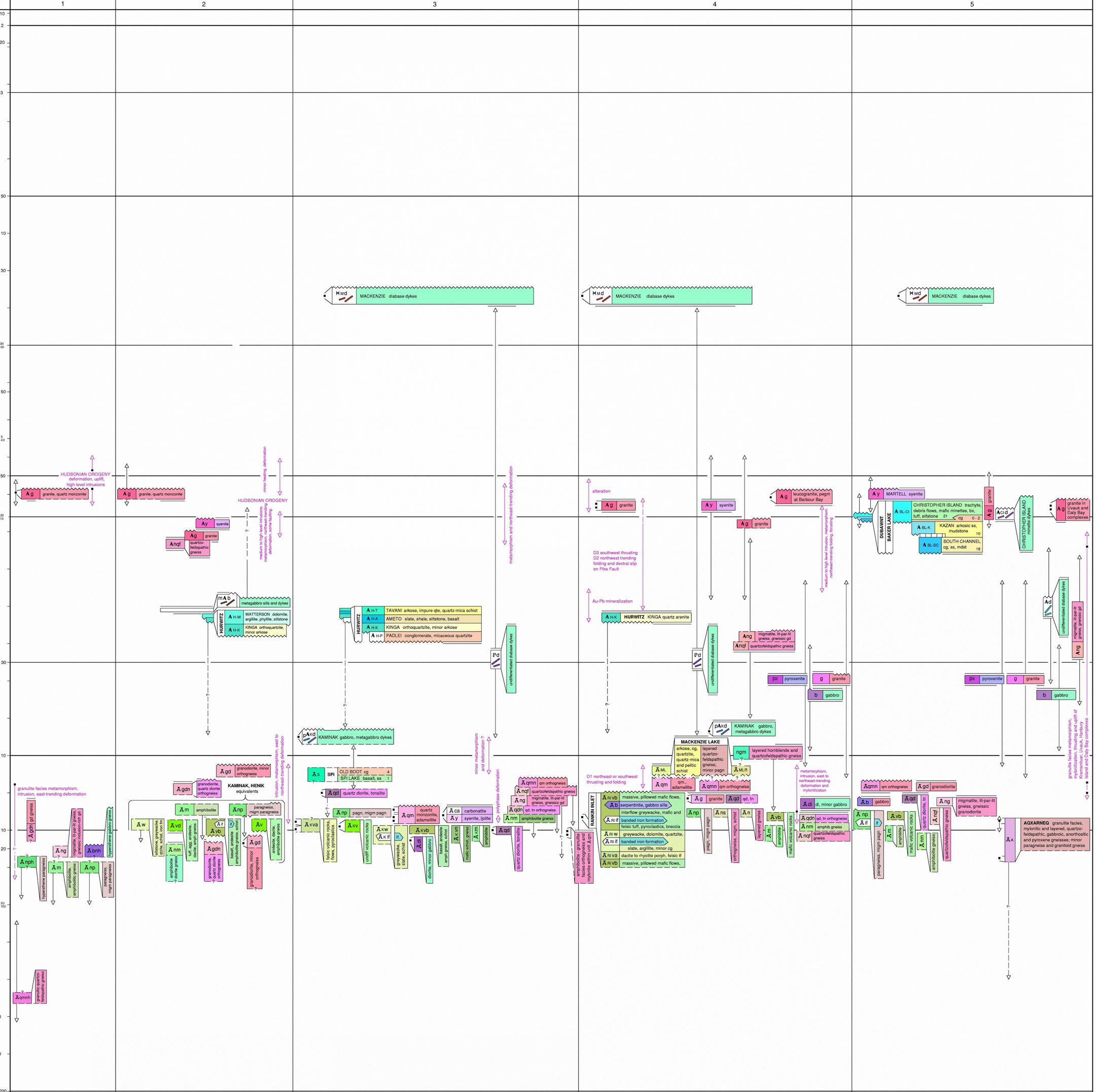
ARCHEAN — LATE — NEOARCHEAN — LATE 2600; 2700 ± 10

EARLY 2750 ± 20; 2800; 2900 +50/-100

MESOARCHEAN 3000; 3100; 3200; 3300; 3400 ± 200

MIDDLE

EARLY — PALEOARCHEAN 3500; 3600; 3700; 3800; 3900



GEOLOGIC TIME CHART REFERENCE

Okulitch, A.V.
1995: Geological time chart, 1995. Geological Survey of Canada, Open File 3040 (National Earth Science Series, Geological Atlas)

Geological compilation by K.E. Eade, A.V. Okulitch, and S. Tella, 1996

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Digital image processing by A.V. Okulitch, Geological Survey of Canada (Calgary)

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

CONVENTIONS

Within each correlation chart column, units are placed above one another to portray relationships among them. Space limitations may require lateral separation of related units, or placing units that are not in contact, above one another. Where numerous units are included in a column and all relationships cannot be shown, first priority is given to stratigraphic (conformable, disconformable or unconformable) relationships. Second priority is given to intrusive contacts, many of which may also be inferred from the map.

Unit descriptors consist of, from left to right, all or some of the following elements:

1) *A block indicating age and age range (with isotopic ages if available). The block contains the map unit colour. The position and vertical extent of only this left - hand element indicate the best estimate of age and age range. The vertical time scale is 1 mm : 5 million years for Precambrian time and 1 mm : 1 million years for Phanerozoic time. Elements to the right may be enlarged to accommodate unit symbols, names and lithologies.*
   Map unit block illustrating age and age range . . . . . .
2) *A solid square placed to the left or right of the unit element indicates an isotopic age or the best interpretation of isotopic data. Vertical arrows indicate possible age range or uncertainty in the isotopic or paleontological range.*
   Isotopic age and age range . . . . . .
3) *The name of a composite unit (e.g. a group or a formation with members).*
   Group or supergroup . . . . . **HURWITZ**
4) *A block containing the map symbol and colour (if not placed in the first element).*
   For explanation of geological unit symbols, see Sheet 1 . . . . . Dc
5) *A block containing the map unit name, lithological description, facies colour and thickness.*
   Formation or intrusive body . . . . . AMETO
   Thickness (hundreds of metres) 6.8

The top and bottom contacts of each element block show relationships to units directly above and below.

CONTACTS

	Established	Uncertain	Unknown
Conformable			
Disconformity (non-sequence)			
Nonconformity, angular unconformity			
Not in contact			

ABBREVIATIONS OF LITHOLOGIES

agg	*agglomerate, agglomeratic*
amph	*amphibolite, amphibolitic*
bx	*breccia*
cg	*conglomerate*
di	*diorite*
fm	*formation*
gd	*granodiorite*
gn	*gneiss*
if	*iron formation*
migm	*migmatite, migmatitic*
pagn	*paragneiss*
pegm	*pegmatite, pegmatitic*
porph	*porphyry, porphyritic*
qd	*quartz diorite*
qm	*quartz monzonite*
qte	*quartzite*
ss	*sandstone, quartz arenite*
tf	*tuff, tuffaceous*
tn	*tonalite, tonalitic*
undiff	*undifferentiated*

FACIES

Dolomite
Chert (with shale or limestone); iron formation
Shale, black, graptolitic, pelagic; floor and trench turbidite; mud
Shale, siltstone, turbidite, mud
Orthoquartzite, quartz arenite, sand
Sandstone, shale, turbidite, conglomerate; clastic wedge
Subgreywacke, arkose, red beds, silt, sand
Volcanogenic clastics: greywacke, shale, silt
Conglomerate, gravel
Tholeiitic basalt, mafic volcanics
Andesite, mixed calc-alkaline volcanics
Rhyolite, acidic alkaline volcanics
Ultramafic rocks, ophiolite, oceanic crust
Gabbro, diorite, diabase, anorthosite
Quartz diorite, trondhjemite, granodiorite
Granite; monzonite; granodiorite
Syenite; syenodiorite; nepheline syenite; carbonatite
Metamorphic complex (undifferentiated)
Paragneiss, schist, quartzite, metagreywacke
Greenstone, amphibolite
Quartzo-feldspathic gneiss, migmatite, orthogneiss of uncertain protolith

Copies of this map may be obtained from the Geological Survey of Canada: 3303-33rd Street N.W., Calgary, Alberta T2L 2A7

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SHEET 2
GEOTECTONIC CORRELATION CHART FOR MAGUSE RIVER, MAP NP-15-16-G

PUBLICATION NOTE

The Geological Atlas of Canada is being published in substandard pre - liminary form to make map data available quickly and because there are no resources for traditional A-series printing. Release on open file does not provide the fine detail of bedrock geology, hydrology, topography or bathymetry of the printed version. A French version is available by special order only.

In addition to these open file maps and charts, base and geological map and text data are available in digital form by special order in a variety of file formats (dwg, dxf, ps) and media (diskette, Iomega Zip).

Sheet 2 of 8, Map NP - 15/16 - G, Precambrian Geotectonic Correlation Chart

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Tella, S., Eade, K.E., Sanford, B.V., and Okulitch, A.V. (compilers) 1997: Geology, Maguse River, District of Keewatin, Northwest Territories. Geological Atlas of Canada, Map NP - 15/16 - G, scale 1:1 000 000. Geological Survey of Canada, Open File 3546.