GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

MAP 1193A

GEOLOGY

YELLOWKNIFE GREENSTONE BELT

DISTRICT OF MACKENZIE

Scale 1:12,000

1 inch to 1000 feet

Feet 1000 0 1000 2000 3000 Feet

Metres 300 0 300 600 900 Metres

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE

INDEX MAP

NORTH SHEET

SOUTH SHEET

Joins top of South Sheet

Joins bottom of North Sheet

LEGEND

NOTE: Areas of outcrops are shown by deep colour; inferred extensions are shown by a lighter tint

PROTEROZOIC

- 14 — Quartz stockwork (giant quartz vein)
- 13 — Diabase gabbro; **13a**, porphyritic
- 12 — Granodiorite; **12a**, containing many inclusions of greenstone; **12b**, containing many inclusions of dark hornblende granodiorite; **12c**, breccia, cemented by quartz
- 11 — Conglomerate, subgreywacke (age relative to Division B of Yellowknife Group and granodiorite uncertain)
- 10 — Meta-diorite
- 9 — Porphyritic (quartz-feldspar) leuco-dacite; includes minor non-porphyritic leuco-dacite
- 8 — Meta-gabbro and meta-diorite; **8a**, porphyritic. Black pattern indicates distinctive dykes used to interpret fault movement. Arrow indicates direction of dip.
- 7 — Meta-gabbro sills and irregular intrusions; **7a**, porphyritic; **7b**, younger than 8 and possibly younger than 9; **7c**, containing many remnants of greenstone

ARCHAEAN

YELLOWKNIFE GROUP (1-6)

DIVISION B

- 6 — Porphyritic (quartz-feldspar) meta-dacite and meta-rhyolite (in part, may be intrusive)
- 5 — Meta-basalt and meta-andesite (greenstone); **5a**, massive lava; **5b**, pillow lava
- 4 — Arkosic quartzite, greywacke, tuffaceous beds, conglomerate; **4a**, crystal tuffs

DIVISION A

- 3 — Cherty tuffs and tuffaceous beds
- 2 — Porphyritic quartz-feldspar dacite, agglomerate, and tuff
- 1 — Meta-basalt and meta-andesite (greenstone); **1a**, massive lava; **1b**, pillow lava; **1c**, mixed massive and pillow lava; **1d**, greenstone injected by granodiorite (12); **1e**, greenstone with many small bodies of meta-gabbro (7); **1f**, variolitic pillow lava, includes some variolitic massive lava; **1g**, agglomerate and breccia

Dykes, too narrow for colour (exposed, drift-covered)
Agglomerate and breccia
Bedding, tops known (inclined, vertical, overturned)
Bedding, tops unknown (inclined)
Bedding, tops indicated by pillow-structure (inclined)
Fault, probably post-diabase (defined, assumed)
Fault, schist zone, probably pre-diabase (defined, assumed)
Mine shaft

Geology by J.F. Henderson, 1946-1949; I.C. Brown, 1946-1948, 1951, 1953

To accompany G.S.C. Bulletin 141 by J.F. Henderson and I.C. Brown.

Geological cartography by the Geological Survey of Canada, 1967

Roads, all weather
Roads, dry weather
Trail
Power transmission line
Pipeline
Buildings
Storage tanks
Wharf
Height in feet above mean sea-level

Base-map cartography, with revisions, by the Geological Survey of Canada, 1965, from base-maps by Topographical Survey, 1946

Geographical names subject to revision

Approximate magnetic declination, 31°05' East, decreasing 6.5' annually.

Origin of co-ordinates latitude 63°00' longitude 114°30'

Geographic position based on astronomical observations

Published, 1967
Copies of this map may be obtained from the Director, Geological Survey of Canada, Ottawa

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