



MAP 45, 1963
TO ACCOMPANY PAPER 63-40
GEOLOGY
NORTHEASTERN DISTRICT OF MACKENZIE
NORTHWEST TERRITORIES

Scale: One Inch to Eight Miles = 1:500,000
Miles 0 8 16 24

LEGEND

PALEOZOIC

CAMBRIAN TO SILURIAN (?)

22 Dolomite

CAMBRIAN (?)

21 Sandstone, minor shale

20 Dolomite (shale and siltstone of more than one age; may include minor metagabbro, metadiorite)

COPPERMINE RIVER GROUP (18-19)

19 Sandstone, shale, argillite

HELLT FLOW

18 Basalt flow

PARRY BAY FORMATION (17)

17 Dolomite, limestone, minor sandstone, shale; 17a, includes dolomite, shale, calcareous sandstone and conglomerate of younger Kanuyak Formation

16 Sandstone, conglomerate

GOULBURN GROUP (10-15)

15 Sandstone, conglomerate

14 Silstone and argillite, sandstone

13 Dolomite, limestone

PROTEROZOIC

12 Argillite, argillite with interstratified limestone and calcareous siltstone

11 Quartzite, orthoquartzite, minor arkose, conglomerate, sandstone

10 Argillite, concretionary argillite, dolomite, quartzite, minor conglomerate

EPWORTH GROUP (7-9) (Probably correlative in part with Goulburn Group)

9 Dolomite

8 Quartzite

7 Argillite, slate

6 Diorite, gabbro, anorthosite; may in part be older than 5, 6a, diorite, gabbro, 6b, anorthosite, anorthositic gabbro

5 Granite, granodiorite, and allied rocks, massive to foliated, of more than one age; locally includes undifferentiated 5a, pegmatite granite, pegmatite, 5b, megacrystic granite, macrocline-granite; 5c, hornblende granite, granodiorite, quartz diorite, minor diorite; 5d, pyroxene-bearing granite and granodiorite; 5e, porphyritic granite, very coarse-grained granite; 5f, granite with inclusions of micro-quartz schist or amphibolite; 5g, granite rock cut by leucogranite

4 Granite gneiss, mafic gneiss, mixed gneiss, gneiss; probably derived in part from suite 3-5; contains some massive granitic rock; 4a, biotite gneiss and megacrystic 4b, hornblende gneiss, amphibolite gneiss, and migmatite, in part granitiferous; 4c, calc-alkaline gneiss and granolite; 4d, quartz and pyroxene-bearing gneiss and granolite; 4e, augite gneiss; 4f, mylonite

YELLOWKNIFE GROUP (1-3)

3 Amphibolite, probably mainly of volcanic origin, includes minor metasediments; may be in part equivalent to 1 and 2, and in part of different age

2 Greywacke, micaceous quartzite, minor argillite and conglomerate, derived schist, commonly contains some granitic material; locally includes rock of volcanic origin; 2a, greywacke, micaceous quartzite, phyllite, micro-quartz schist; 2b, white micaceous-quartzite; 2c, slate, argillite; 2d, conglomerate; 2e, horned schist, garnet- and sillimanite-bearing schist

1 Greenstone and amphibolite derived mainly from intermediate to acidic volcanic rocks; includes metasediments locally; 1a, greenstone, amphibolite; 1b, amphibolite; 1c, metamorphosed acidic volcanic rocks; 1d, greenstone containing lenses and layers of carbonate

Drift-covered area boundary

Geological boundary (defined or approximate, gradational)

Geological boundary in drift-covered area (from air photos)

Bedding, top known (horizontal, inclined, overturned)

Bedding, top unknown (inclined, vertical)

Schistosity, generally, foliation (horizontal, inclined, vertical, dip unknown)

Cleavage (horizontal, inclined, vertical)

Lamination (horizontal, inclined, vertical)

Fault (approximate, assumed)

Joint (horizontal, inclined, vertical)

Structure (direction of plunge known, unknown)

Fossil locality

Age determination (potassium-argon, fission track, muscovite (m))

Pitlike structure

Trench

Mineral prospect, mineral occurrence

Symbols for Metals and Minerals

Arenaceous iron formation

Chalcopyrite

Copper (native)

Galena

Graphite

Gold

Iron formation

Iron Oxide (massive)

Magnetite

Pyrrhotite

Pyrite

Silver

Geology by H. H. Baskin, J. A. Davidson, J. A. Fraser, W. H. Poole, F. M. G. Williams, 1962

Geological Cartography by the Geological Survey of Canada, 1963

Trading Post

Wireless Station

District boundary

City

Estab.

Road

Marsh

Rapid

Height in feet above mean sea-level

Base-map compiled and drawn by the Survey and Mapping Branch, 1952, 1956, 1958

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