GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS

PRELIMINARY SERIES

95 E

LEGEND

Note: Weighted legend blocks indicate map-units that appear on this map

CENOZOIC

PLEISTOCENE AND RECENT

36 Unconsolidated glacial and alluvial deposits

MESOZOIC

CRETACEOUS (?)

35 Quartz monzonite, granodiorite; minor granite and diorite; 35a, hornblende diorite; 35b, rusty weathering granodiorite

DEVONIAN AND (?) MISSISSIPPIAN

34 Black shale, locally pyritic; minor thin beds of black limestone; recessive weathering

MIDDLE DEVONIAN

33 NAHANNI FORMATION: resistant, fine- to medium-grained, light grey weathering limestone

32 32a, well-bedded light grey limestone and/or dolomite; 32b, well-bedded dark grey limestone and/or dolomite

31 HEADLESS FORMATION: buff-brown, argillaceous, platy limestone; minor shale; highly fossiliferous; commonly recessive weathering; 31a, undivided 28, 30, and 31; includes light buff weathering calcareous slate and argillaceous limestone in lower part; 31b, undivided 30 and 31

30 LANDRY FORMATION: crypto-grained to medium-grained grey limestone; commonly forms banded outcrops

29 MANETOE FORMATION: coarse-grained cream and light grey dolomite; coarse-grained limestone; crypto-grained, laminated dolomite; 29a, includes crypto-grained to medium-grained, massive limestone in lower part

MIDDLE DEVONIAN

28 ARNICA FORMATION: medium and dark grey, banded dolomite; dolomite breccia; 28a, undivided 28 and 27

LOWER DEVONIAN

27 SOMBRE FORMATION: light and medium grey, banded dolomite; silver-grey dolomite; 27a, dark grey dolomite; 27b, may include some 28

LOWER DEVONIAN (?)

26 CAMSELL FORMATION: buff limestone breccia; interbedded grey and buff weathering dolomite and limestone

SILURIAN AND DEVONIAN

25 DELORME FORMATION: buff, grey, cinnamon weathering dolomite and limestone; locally limestone breccia in upper part may be correlative with 26; 25a, includes (?) 26

ORDOVICIAN AND SILURIAN

UPPER ORDOVICIAN AND SILURIAN

24 WHITTAKER FORMATION: dark grey dolomite, light grey limestone; commonly cherty; 24a may locally include 21 and 22

ORDOVICIAN AND SILURIAN (Mainly)

23 Black, pyritic shale, locally slaty or phyllitic; thin-bedded, black, argillaceous limestone; grey and black chert; calcareous siltstone; black, cherty dolomite; 23a, hornfels; includes Devonian and (?) Mississippian

PALAEOZOIC

ORDOVICIAN

MIDDLE AND (?) EARLY UPPER ORDOVICIAN

22 Dark and light grey dolomite; pink, mottled limestone; orange-brown sandstone; 22a, vesicular mafic flow or flows; 22b, undivided 22 and 21; 22c, undivided 22 and 24; 22d, grey dolomite; 22e, buff, cream, grey dolomite and limestone; 22f, dark grey and black, cherty dolomite

CAMBRIAN AND ORDOVICIAN

21 Orange weathering, grey limestone; minor siltstone; 21a, undivided 21, 17, and 14

CAMBRIAN AND/OR ORDOVICIAN

20 20, undivided; 20a, grey, slaty, argillaceous limestone; buff, calcareous slate; 20b, well-banded, buff limestone

CAMBRIAN

LOWER, MIDDLE AND (?) UPPER CAMBRIAN

19 Red, buff, yellow, and grey weathering dolomite, siltstone, sandstone, limestone

CAMBRIAN

MIDDLE AND (?) UPPER CAMBRIAN

17 Buff and orange weathering, dolomitic siltstone; silty dolomite; calcareous sandstone; stromatolitic dolomite; 17a, includes silver-grey weathering carbonate; 17b, mainly dark grey shale; includes 17a in upper part; 17c, laminated, buff-brown and orange-brown weathering dolomite; calcareous slaty siltstone, red and green shale; age uncertain; 17d, correlation uncertain

MIDDLE AND (?) UPPER CAMBRIAN

18 Wavy banded, silty limestone; platy impure limestone; siltstone; limestone; locally includes 16 and 20; 18a, may include 15; 18b, argillaceous limestone, calcareous shale

LOWER AND/OR MIDDLE CAMBRIAN

16 16a, bright yellow and orange weathering silty and sandy dolomite; grey limestone; 16b, silty and sandy dolomite; minor sandstone and shale

CAMBRIAN (?)

14 Brown and dark grey, shaly carbonate; locally orange weathering, recessive-weathering unit at base; may be in part correlative with 17b

LOWER CAMBRIAN

15 15a, limestone; calcareous siltstone; 15b, sandstone, sandy and silty dolomite, dolomite, argillite; minor quartzite and impure limestone; 15c, dolomite and limestone; sandy dolomite and dolomitic sandstone; 15d, cherty calc-silicate rocks; may locally include metamorphosed 16 and 18; 15e, thin-bedded, dark brown to black pyritic argillite, calcareous shale; minor limestone

CAMBRIAN AND/OR EARLIER

13 13a, white, pink, purple quartzite and sandstone; slate, calcareous sandstone; minor pebble conglomerate; 13b, crypto-grained, mottled, mauve, pink, banded limestone and dolomite, locally silty and sandy; minor quartzite and brick red to purple shale; 13c, deep blood red weathering, iron-flecked, grey to green, interbedded quartzite, siltstone, argillite; minor fine conglomerate; 13d, buff to red weathering, light grey dolomite

CAMBRIAN AND EARLIER

12 12a, phyllite, slate, fine-grained quartzite, siltstone, argillite; 12b, agglomerate, conglomerate, tuff, vesicular volcanic rocks, green and maroon weathering; chlorite schist

11 Dark shale and slate, gritty quartzite, calcarenite, quartz-pebble conglomerate; sandstone; maroon, green, and buff shale and slate; minor limestone and phyllite; 11a, rusty aureole of hornfels and slightly metamorphosed unit 11

PROTEROZOIC

10 Orange and brown-orange weathering, platy, sandy carbonate

9 Recessive weathering, dark grey shale and siltstone

8 Orange weathering, dolomitic sandstone; sandy dolomite; includes mafic flow near top of unit east of Grizzly Bear Lake

7 Mudstone; green and buff-brown siltstone; conglomeratic mudstone; conglomerate; maroon weathering siltstone, slate, iron-formation; undivided; 7a, maroon weathering siltstone, slate, conglomerate, iron-formation; 7b, includes siltstone, dolomite, and mafic volcanic rocks

6 Light grey weathering, dark grey, fetid limestone; thin-bedded grey limestone; black slate; buff, silty limestone; limestone conglomerate

5 Pink slaty siltstone; 5a, blocky, medium-grained gabbro

4 Buff, grey dolomite, orange and buff-orange weathering, locally sandy and cherty; minor laminated buff and orange weathering siltstone; conglomerate; slate

3 Well-bedded, grey, stromatolitic limestone, locally oolitic; light grey dolomite, in part cherty; minor slate; includes mafic sill or flow east of Keele River; 3a, mafic sill or flow; 3b, hornblende diorite

2 White, pink, purple quartzite; grey, green, purple slate; minor brown weathering dolomite; 2a, includes 17c

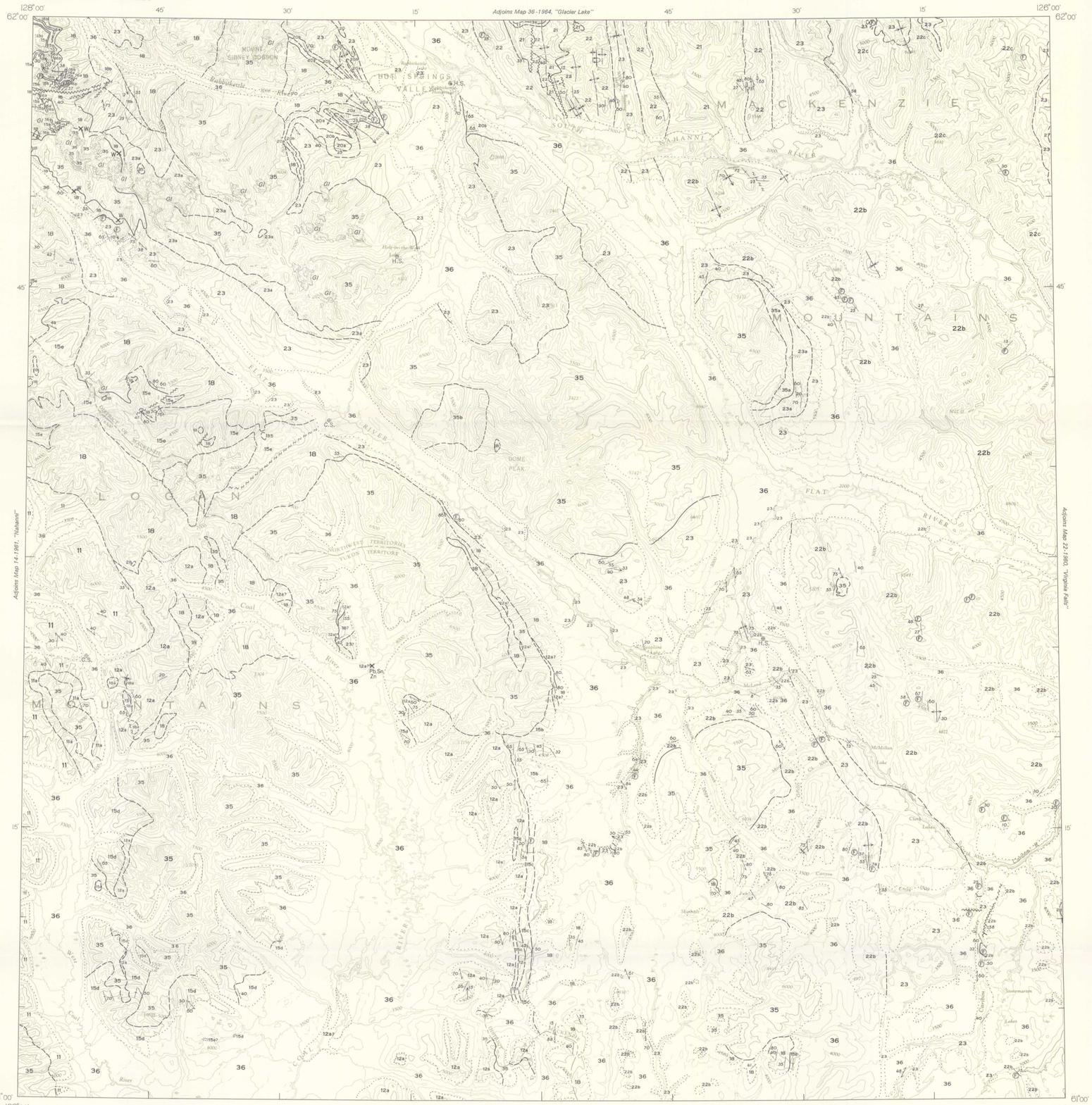
1 Grey, olive-green, purple shale, slate, phyllitic slate, quartzite; interbeds of orange dolomite

Mineral Symbols

Copper	Cu
Lead	Pb
Silver	Ag
Tin	Sn
Tungsten	W
Zinc	Zn

Geology by H. Gabrielse, J. A. Roddick, and S. L. Blusson, 1963

Geological cartography by the Geological Survey of Canada, 1964



Geological boundary (defined, approximate and assumed)
Drift boundary
Limit of geological mapping
Bedding (horizontal, inclined, vertical, overturned)
Foliation (inclined, vertical)
Plunge of lineation
Fault (defined, approximate, assumed); solid circle indicates downthrow side
Thrust fault (defined, approximate, assumed; arrow indicates direction of dip
Anticline (defined, approximate) arrow indicates direction of plunge
Syncline (defined, approximate) arrow indicates direction of plunge
Anticline, syncline (overturned)
Location of measured section
Fossil locality Ⓕ
Mineral prospect or occurrence Cu×
Springs (hot, cold) H.S.⊛ C.S.⊛

Provincial boundary
Intermittent stream
Marsh
Glacier Gl
Contours (interval 500 feet)
Height in feet above mean sea-level 9097

MAP 35-1964
PAPER 64-52

GEOLOGY

FLAT RIVER

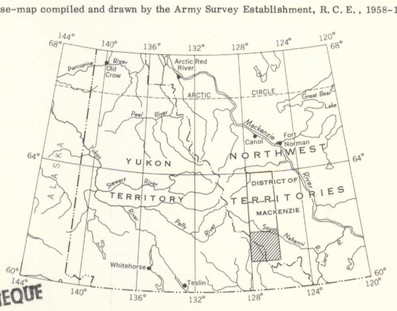
YUKON TERRITORY – DISTRICT OF MACKENZIE

Scale 1:253,440
1 inch to 4 miles

Miles 4 0 4 8 12 Miles
Kilometres 6 0 6 12 18 Kilometres

Mean magnetic declination, 33°52' East, decreasing 4.2' annually. Readings vary from 33° 14' in the SE corner to 34° 34' in the NW corner of the map-area

Base-map compiled and drawn by the Army Survey Establishment, R. C. E., 1958–1960



MAP 35-1964
FLAT RIVER
YUKON TERRITORY
DISTRICT OF MACKENZIE
95 E