LEGEND

Note: this legend is common to maps 1313A, 1314A and 1315A.

CENOZOIC

PLEISTOCENE AND RECENT

Q — *Unconsolidated glacial and alluvial deposits*

MESOZOIC

CRETACEOUS (?)

Kg — *Quartz monzonite, granodiorite; minor granite and diorite; 1, hornblende diorite; 2, rusty weathering granodiorite*

PALEOZOIC

DEVONIAN AND MISSISSIPPIAN (?)

DM — *Black, pyritic shale; green, grey and maroon siltstone and sandstone; thin-bedded, black, argillaceous limestone*

DEVONIAN

MIDDLE DEVONIAN, GIVETIAN

Dn — *NAHANNI FORMATION: resistant, fine- to medium-grained light grey weathering limestone*

Dh — *HEADLESS FORMATION: buff-brown, argillaceous, platy limestone; minor shale; highly fossiliferous; commonly recessive*

MIDDLE DEVONIAN, EIFELIAN AND GIVETIAN (?)

Dl — *LANDRY FORMATION: cryptograined to medium-grained grey limestone; commonly forms banded outcrops; 1, undivided* Dl *and* Dh

MIDDLE DEVONIAN, EIFELIAN

Dm — *MANETOE FORMATION: cream and light grey, coarse-grained, cavernous dolomite; cryptograined limestone*

Dna — *NATLA FORMATION: thin-bedded sooty limestone; light grey crinoidal limestone; 1, light grey crinoidal limestone, black, recessive, platy limestone; 2, includes* Dl *and* Dh

Df — *FUNERAL FORMATION: buff weathering argillaceous limestone, brown and black shale; 1, includes* Dh

Dgb — *GRIZZLY BEAR FORMATION: massive, light grey limestone and dolomite*

Da — *ARNICA FORMATION: medium to dark grey, banded dolomite; dolomite breccia; 1, undivided* Ds *and* Da *2, BEAR ROCK FORMATION: massive, cavernous, light grey limestone and dolomite breccia*

LOWER DEVONIAN

Ds — *SOMBRE FORMATION: light and medium grey, banded dolomite; silver-grey dolomite; 1, dark grey dolomite; 2, undivided* Dc, Ds, Da

Dc — *CAMSELL FORMATION: interbedded grey and buff weathering dolomite and limestone; buff limestone breccia*

SILURIAN AND DEVONIAN

UPPER SILURIAN AND LOWER DEVONIAN

SDd — *DELORME FORMATION: buff, grey and cinnamon weathering dolomite and limestone; locally includes limestone breccia in upper part probably correlative with part of Camsell Formation; 1, includes (?)* Dc

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

OSDr — *ROAD RIVER FORMATION: black, pyritic shale, locally phyllitic; thin-bedded, black, argillaceous limestone; pale olive-green, shaly limestone, grey and black chert; calcareous siltstone; black cherty dolomite; locally includes strata of Middle Devonian to Mississippian (?) age; 1, hornfels; 2, probably includes minor* OSw

ORDOVICIAN AND SILURIAN

UPPER ORDOVICIAN AND SILURIAN

OSw — *WHITTAKER FORMATION: dark grey, cherty dolomite; light grey limestone commonly basal; 1, cherty black dolomite and limestone; 2, dolomite, in part massive and reefoid*

MIDDLE ORDOVICIAN

Os — *SUNBLOOD FORMATION: dark and light grey dolomite; pink, mottled limestone; orange-brown sandstone; 1, vesicular, mafic flow or flows; 2, dolomite and limestone, may include some* €Obs *; 3, grey dolomite; 4, buff, cream, grey dolomite and limestone; 5, undivided* €Obs *and* Os *; 6, may include* OSw

CAMBRIAN AND ORDOVICIAN

UPPER CAMBRIAN AND LOWER ORDOVICIAN

€O — *Argillaceous limestone; calcareous shale; 1, undivided* €O *and* Os

€Or — *RABBITKETTLE FORMATION: wavy banded, silty limestone; platy impure limestone; siltstone; limestone*

€Obs — *BROKEN SKULL FORMATION: grey, buff, orange and yellow weathering dolomite and limestone, lower part variably sandy and silty; 1, basal silver-grey sandstone and sandy dolomite overlain by orange-buff weathering dolomite; 2, grey dolomite and limestone, includes* Os*; 3, well banded, rhythmically bedded, grey and buff-orange dolomite; 4, buff-orange dolomite, locally sandy, locally includes limestone and varicoloured shale, age uncertain*

MIDDLE CAMBRIAN

€a — *AVALANCHE FORMATION: buff, yellow, and orange weathering; cryptograined dolomite, silty dolomite, dolomite siltstone, dolomitic mudstone*

€r — *ROCKSLIDE FORMATION: black to orange-buff weathering; dark grey, sooty argillaceous limestone and calcareous siltstone; shale; minor sandstone, dolomite*

LOWER CAMBRIAN

€ — *Dark grey-brown to black calcareous argillite, slate, shale, locally pyritic; minor argillaceous limestone*

€s — *SEKWI FORMATION: undivided; 1, limestone, calcareous siltstone; 2, sandstone, sandy and silty dolomite, dolomite, argillite; minor quartzite and impure limestone; 3, mafic volcanics, agglomerate, tuff, vesicular volcanic rocks, green and maroon weathering; chlorite schist; 4, BRINTNELL MEMBER: bright yellow and orange weathering silty and sandy dolomite; grey limestone; 5, silty and sandy dolomite; minor sandstone and shale; 6, limestone and dolomite; 7, cherty calc-silicate rocks*

€br — *BACKBONE RANGES FORMATION: undivided; 1, white, brown, pink and purple sandstone and quartzite, siltstone, slate, calcareous sandstone, slate; minor silty and sandy dolomite; 2, cryptograined, mottled, mauve, pink, banded limestone and dolomite, locally silty and sandy; minor quartzitic sandstone and brick red to purple shale; 3, pink, purple, grey and brown sandstone; siltstone; pebble conglomerate*

CAMBRIAN AND (?) HADRYNIAN

€H — *'Phyllite Unit': phyllite, slate, fine-grained quartzite, siltstone, argillite*

HADRYNIAN

H — *'Grit Unit': dark shale and slate, gritty quartzite, calcarenite, quartz-pebble conglomerate; sandstone; maroon, green and buff shale and slate; minor limestone and phyllite; 1, rusty aureole of hornfels and slightly metamorphosed unit* H

Hs — *SHEEPBED FORMATION: recessive dark grey shale and siltstone; 1, orange and orange-brown weathering shale, argillaceous siltstone and sandstone*

Hk — *KEELE FORMATION: orange weathering, dolomitic sandstone; sandy dolomite; dolomite; 1, mafic flow east-southeast of Grizzly Bear Lake*

Hr | Hr¹ — *RAPITAN GROUP: mudstone, green and buff-brown siltstone; conglomeratic mudstone; conglomerate; sandstone; shale, undivided; 1, maroon weathering siltstone, slate, conglomerate, iron-formation; 2, brown-orange, buff and grey-brown weathering conglomeratic mudstone; 3, grey and green-grey weathering sandstone, siltstone and shale*

PROTEROZOIC

HELIKIAN (?)

Hc — *COPPERCAP FORMATION: buff weathering silty limestone and calcareous siltstone; dark grey fetid limestone; black, buff, grey calcareous slate; minor limestone conglomerate*

Hrr — *REDSTONE RIVER FORMATION: pink slaty siltstone and minor shale; gypsum; gypsiferous siltstone; 1, blocky, medium-grained gabbro*

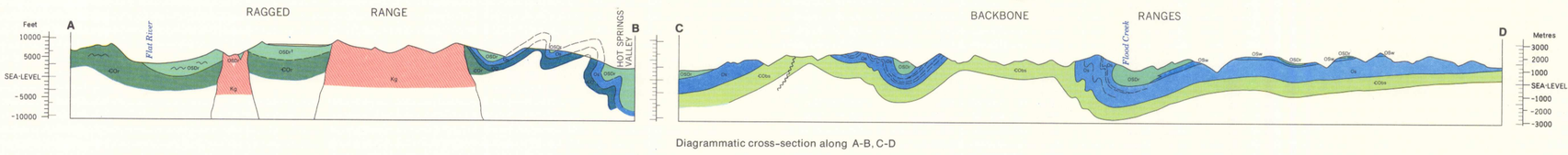
Hldu — *LITTLE DAL FORMATION, UPPER MEMBER: buff, grey locally stromatolitic dolomite, orange and buff-orange weathering, locally sandy and cherty; minor laminated buff and orange weathering siltstone; conglomerate, slate; 1, sandstone, basalt*

Hldl — *LITTLE DAL FORMATION, LOWER MEMBER: well-bedded, grey, stromatolitic limestone, locally oolitic; light grey dolomite, in part cherty; minor slate; may locally include* Hldu *; 1, mafic sill and flows; 2, hornblende diorite; 3, platy, grey-brown weathering limestone, correlation uncertain*

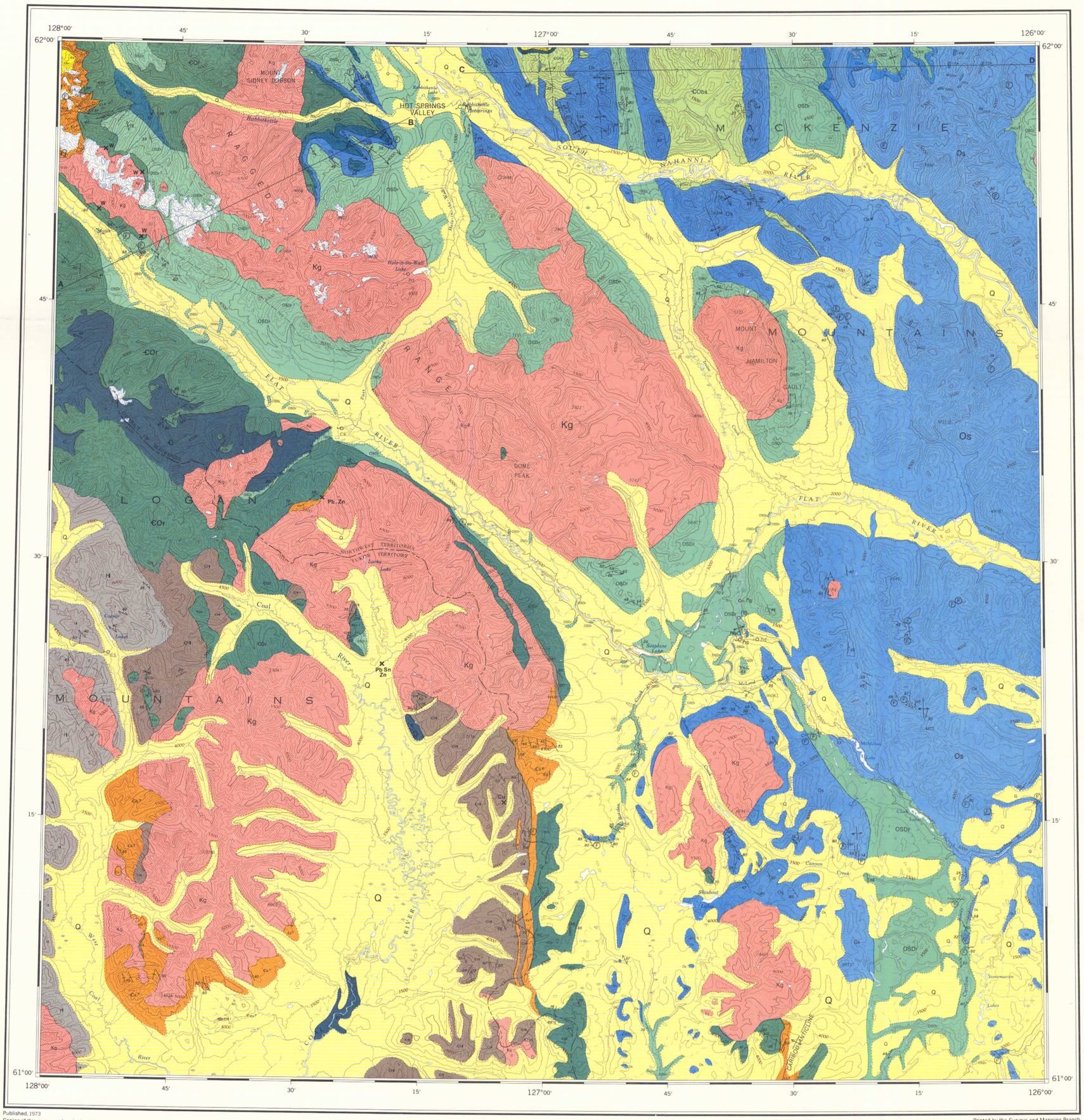
Ht — *TIGONANKWEINE FORMATION: white, pink, purple quartzite; grey green, purple slate; minor brown weathering dolomite; 1, pink, purple, and white quartzite; 2, orange-brown weathering dolomite, siltstone, and shale*

Hts — *TSEZOTENE FORMATION: grey, olive-green, purple shale, slate, phyllitic slate, quartzite; interbeds of orange-buff dolomite*

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES



Diagrammatic cross-section along A-B, C-D

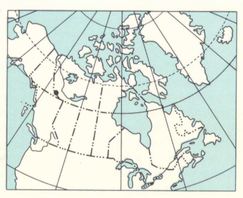


Published, 1973
Copies of this map may be obtained from the Geological Survey of Canada, Ottawa

Printed by the Surveys and Mapping Branch

REFERENCE

- Rock outcrop
- Geological boundary (defined, approximate and assumed)
- Bedding (horizontal, inclined, vertical, overturned)
- Foliation (inclined, vertical)
- Lineation
- Fault (defined, approximate, assumed, solid circle indicates downthrow side, arrows indicate relative movement)
- Thrust fault (defined, approximate, assumed, teeth indicate upthrust side)
- 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) hs, cs



INDEX MAP

MAP 1313A

GEOLOGY

FLAT RIVER

DISTRICT OF MACKENZIE - YUKON TERRITORY

Scale 1:250,000

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

Universal Transverse Mercator Projection

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa

Magnetic declination 1972 varies from 33°21′ easterly at centre of west edge to 33°26′ easterly at centre of east edge. Mean annual change decreasing 4.8′

Elevations in feet above mean sea-level

Names in quotation marks are in local usage but are subject to revision

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

MINERALS

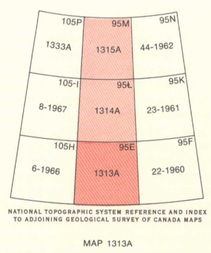
- Copper Cu
- Lead Pb
- Tin Sn
- Tungsten W
- Zinc Zn

Geology by H. Gabrielse, J.A. Roddick, and S.L. Blusson, 1963, H. Gabrielse, S.L. Blusson, 1965-66

To accompany Memoir 366 by H. Gabrielse, J.A. Roddick and S.L. Blusson

Geological cartography by the Geological Survey of Canada

Base-map at the same scale published by the Army Survey Establishment, R.C.E. 1958-60



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

MAP 1313A
FLAT RIVER
DISTRICT OF MACKENZIE - YUKON TERRITORY