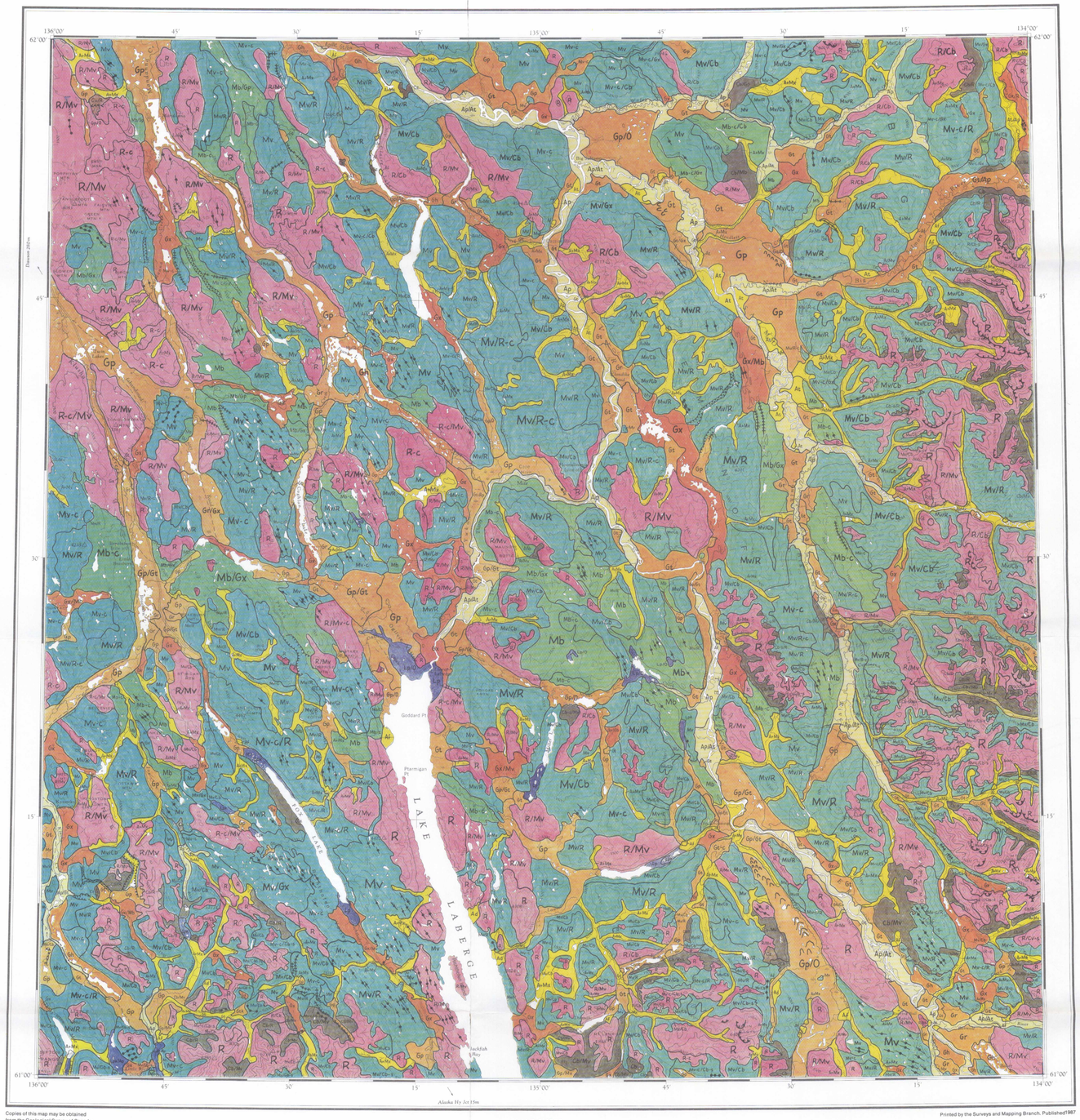
GEOLOGICAL SURVEY OF CANADA COMMISSION GÉOLOGIQUE DU CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES



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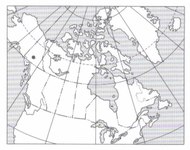
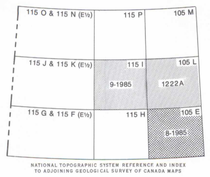


INDEX MAP

MAP 8-1985
SURFICIAL GEOLOGY
LABERGE
YUKON TERRITORY
Scale 1:250 000

Kilometres 5 0 5 10 15 20 Kilometres

Universal Transverse Mercator Projection



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

Canada

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LEGEND

	NATURE OF MATERIAL AND ESTIMATED THICKNESS	GENETIC DESCRIPTION	MORPHOLOGIC EXPRESSION	COMMENTS
O	peat and muck; 1 to 2 m thick	organic deposits	flat areas of bog and fen; distinctive features such as palsen and peat plateaus are rare	Bog and fen are of limited extent. Unmapped patches occur along the bottoms of some alpine valleys
Cz	mixtures of material derived from glacial deposits and bedrock; thickness is variable	landslide, earth flow, solifluction, and rock glacier deposits	irregular or hummocky surfaces	A few earth flows or landslides are mapped, but large distinctive features were not recognized; unmapped minor deposits are widespread in high mountainous terrain
Cb	rock rubble and/or reworked glacial deposits	colluvium consisting of material redeposited by downslope movement	surface reflects morphology of underlying material; commonly occurs on bedrock slopes in mountainous terrain	Colluvium is widespread over mountain slopes, particularly in the zone between the lower parts of the slopes and the extensive bedrock exposures in the upper parts
Ap	gravel, sand, and silt; 5 to 20 m thick	alluvial valley bottom deposits	gently irregular to nearly flat surfaces that include mostly floodplains of modern streams; small features such as stream terraces and alluvial fans may be present; abandoned channels and point bars are the most prominent features on these surfaces	Most of the deposits are mapped as compound units in valleys where modern streams are incised in older alluvium (At) or glaciofluvial deposits (Gt); aggregate source
At	gravel, sand, and silt; 5 to 20 m thick	alluvial terraces	gently irregular or nearly flat, low level terraces bordering alluvial plains	Most terraces were formed by modern stream activity; they are separated from older terraces of glaciofluvial origin (Gt) on the basis of their close association with modern streams and by the absence of pitted ice-contact features; aggregate source
Ad	gravel, sand, and silt; 5 to 20 m thick	alluvial deltas	gently irregular or nearly flat surfaces	Features mapped as deltas are not unlike alluvial fans, except for the relatively low gradients common to alluvial deltas; aggregate source
Af	gravel, sand, and silt; 5 to 20 m thick	alluvial fans	gently irregular, channelled surface with marked slope towards valley bottom	Fans are common along the sides of steep-walled, glaciated valleys; most are small features and were not mapped; aggregate source
Lp	clay, silt, and sand; 5 to 10 m thick	glaciolacustrine deposits	gently irregular or nearly flat surfaces along the bottoms and lower slopes of large valleys	Local patches of glaciolacustrine deposits occur within larger valleys and may underlie units mapped as Gp and Gt
Gp	gravel, sand, and silt; 5 to 20 m thick	outwash plains	gently irregular or nearly flat terrain marked by shallow channel patterns or locally pitted surfaces	Extensive outwash occurs along the valleys of Yukon, Big Salmon, and Klusha rivers; some glaciolacustrine deposits may be included; aggregate source
Gt	silt, sand, and gravel; 5 to 50 m thick	terraces underlain by glaciofluvial and/or glaciolacustrine deposits	nearly flat to irregular, pitted surfaces	Terraces occur within abandoned meltwater channels or at higher levels along former meltwater channels occupied by modern streams; aggregate source
Gr	sand and gravel; 5 to 30 m thick	ice-contact glaciofluvial deposits	strongly irregular, ridged, and kettled terrain with local relief to 30 m	Surfaces consist mainly of prominent esker-like, anastomosing ridges; aggregate source.
Gh	silt, sand, and gravel; 5 to 30 m thick	ice-contact glaciofluvial deposits	strongly irregular, pitted, or hummocky terrain with local relief to 30 m	Mainly knob-and-kettle topography; aggregate source
Gx	gravel, sand, silt, and till; 1 to 20 m thick	meltwater channel and glaciofluvial complexes	gently irregular or hummocky glaciofluvial deposits along with minor patches of till and bedrock; surfaces are in part marked by braided channels	These complexes occur in broad valleys where meltwater activity resulted in closely spaced channels and depositional features too numerous and small to be mapped
Mb	till; silty to sandy matrix; 1 to 30 m thick	lodgment and ablation till	irregular to strongly irregular bedrock topography blanketed by till	Morainic blankets form a nearly continuous cover within some large valleys in mountainous terrain
Mv	till; silty to sandy matrix; bouldery; generally less than 1 m thick	ablation and lodgment till	bedrock terrain with a discontinuous cover of till	Morainic veneer forms a discontinuous cover where it is typically associated with colluvium and exposed bedrock
A + Mx	gravel, sand, silt, and till; thickness is variable	valley bottom complex of alluvial, colluvial, and glacial deposits	nearly flat to strongly irregular terrain with relief to 30 m	These complexes are mapped within mountain valleys where different units are not separated because of mapping scale or because they cannot be recognized on airphotos
R	bedrock and bedrock rubble	bedrock outcrop and shattered bedrock	mountainous terrain and low hills and ridges adjacent to mountain fronts or within broad mountain valleys	Rock rubble veneer is common on the slopes of the higher parts of mountainous terrain

Explanation of Letter Notation

A combination of letters is used to designate a map unit, e.g. Mv, or a component of a compound map unit, e.g. Mv/Cv. The upper case letter indicates the broad compositional-genetic class; the lower case letters indicate the morphology.

Occurrence of numerous erosional features within a map unit is indicated by the addition of a dash and a lower case letter, e.g. Mv-c, to the above letter designation.

Compound map units are used for areas of more than one component that could not be separated at the scale of mapping. The first component, which is the dominant one, is separated by a diagonal line from the second component, e.g. Mp/Mv.

Compositional-genetic category

O - organic: peat and muck
C - colluvial: various materials
A - alluvial: gravel, sand, and silt
L - glaciolacustrine: clay, silt, and sand
G - glaciofluvial: silt, sand, and gravel
M - morainal: till
R - bedrock: various types

Morphologic category

p - plain, floodplain
h - hummocky
t - terraced
r - ridged
d - delta
b - blanket
v - veneer
x - complex

Other modifiers

c - channelled
s - soliflucted
k - thermokarst

Geological boundary
Cirque
Drumlin, drumlinoid ridge, glacial fluting
Minor moraine; crevasse filling
Esker
Meltwater channel (major, minor)
Dunes

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

Base map at the same scale published by the Surveys and Mapping Branch in 1958

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, Ontario, K1A 0E9

Mean magnetic declination 1986 30°02' East decreasing 14.9' annually. Readings vary from 29°29' in the SW corner to 30°37' in the NE corner of the map

Elevations in feet above mean sea level

Geology by R.W. Klassen and S.R. Morison, 1978-1979.

Recommended citation:
Klassen, R.W. and Morison, S.R. 1987: Surficial geology, Laberge, Yukon Territory; Geological Survey of Canada, Map 8-1985, scale 1:250 000

MAP 8-1985
LABERGE
YUKON TERRITORY