Geological contact
- Defined
- Approximate
- Inferred
- Concealed

Facies change
- Approximate
- Inferred

Thin map unit, displayed in map-unit colour
- Defined
- Approximate
- Inferred
- Concealed

Escarpment
- Defined
- Approximate

Normal fault, solid circle indicates downthrown side
- Approximate
- Inferred
- Concealed

Thrust fault, teeth indicate upthrust side
- Defined
- Approximate
- Inferred
- Concealed

Transverse fault
- Approximate
- Inferred

Steep dip fault
- Approximate

Slump escarpment
- Defined

Landslide, scarp
- Approximate

Anticline, upright, overturned
- Defined
- Approximate
- Inferred
- Concealed

Syncline, upright, overturned
- Defined
- Approximate
- Inferred
- Concealed

Anticline, upright, homeoclinic, shorter arrow on steeper limb
- Approximate

Syncline, upright, homeoclinic, shorter arrow on steeper limb
- Approximate
- Inferred

Outcrop visited, attitude not determined

Bedding
- Top known, horizontal
- Top known, inclined
- Top known, vertical, ball on younger side
- Top known, overturned
- Top unknown, inclined

Cleavage, inclined

Dyke, inclined

Joint, inclined

Fold hinge
- Map-scale, inclined
- Minor, inclined
- Minor U-shaped, inclined
- Minor Z-shaped, inclined

Minor syncline, overturned, axial plane

Mineral locality (see table for type)

Mine

Change in mapping precision, stratigraphic subdivisions are amalgamated at dotted line

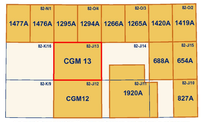
Measured section (number refers to internal cataloguing system)
AC: J.D. Aitken, NE; B.S. Norford

Abstract

Mount Assiniboine map area (NTS 82-J/13, 1:50 000 scale) straddles portions of the Front Ranges, Main Ranges and Western Ranges subdivisions of the Southern Canadian Rocky Mountains, from northeast to extreme southwest. Thrusts carrying folded Ordovician, Devonian, and Mississippian carbonate and clastic strata characterize the Front Ranges, where Upper Devonian Fairholme Group strata change facies from reef to basinal deposits. At the Middle and Upper Cambrian Kicking Horse Rim, an abrupt westward facies change from competent platform and ramp carbonate units to thick basinal strata, divides the Main Ranges into eastern broadly folded and western penetratively deformed parts. Tight and overturned northeast-facing folds occur immediately west of the Kicking Horse Rim. Boulders and blocks shed from the rim are spectacularly exposed near Indian Peak. Hydrothermal alteration localized at the rim produced magnesite ore near Mount Brussilof. Folded Lower to Upper Ordovician strata cut by steep to overturned thrusts characterize the Western Ranges.

Résumé

La région de la carte Mount Assiniboine (82-J/13 du SNRC, à l'échelle de 1/50 000) couvre des parties des subdivisions des chaînons frontaux, des chaînons principaux et des chaînons de l'ouest des Rocheuses canadiennes du sud, du nord-est à l'extrême sud-ouest. Des chevauchements comportant des couches carbonatées et clastiques plissées de l'Ordovicien, du Dévonien et du Mississippien caractérisent les chaînons frontaux, tandis que les couches du Groupe de Fairholme du Dévonien supérieur passent d'un milieu dépositaire récifal à celui de bassin. À la bordure de Kicking Horse du Cambrien moyen et supérieur, un changement de faciès abrupt vers l'ouest entre des unités carbonatées compétentes de plateforme et de rampe et d'épaisses couches de bassin, divise les chaînons principaux en deux parties : une partie est à grands plis et une partie ouest à déformation pénétrative. Des plis serrés à déversement vers le nord-est sont observés immédiatement à l'ouest de la bordure de Kicking Horse. Des roches et des blocs provenant de la bordure sont à découvert et présentent un aspect spectaculaire près du pic Indian. La présence de minerai de magnésite près du mont Brussilof est attribuable à une altération hydrothermale localisée immédiatement à l'intérieur de la bordure. Des couches plissées de l'Ordovicien inférieur à supérieur, recoupées par des chevauchements diverses abrupts, caractérisent les chaînons de l'ouest.



National Topographic System reference and index to adjoining published Geological Survey of Canada maps

Cover illustration:
Thick Middle and Upper Cambrian carbonate units developed at the Kicking Horse Rim form high castellated peaks including Mount Assiniboine (back centre). Mount Brussilof magnesite mine, Mitchell River, British Columbia.
Photograph by M.E. McMechan. 2010-271

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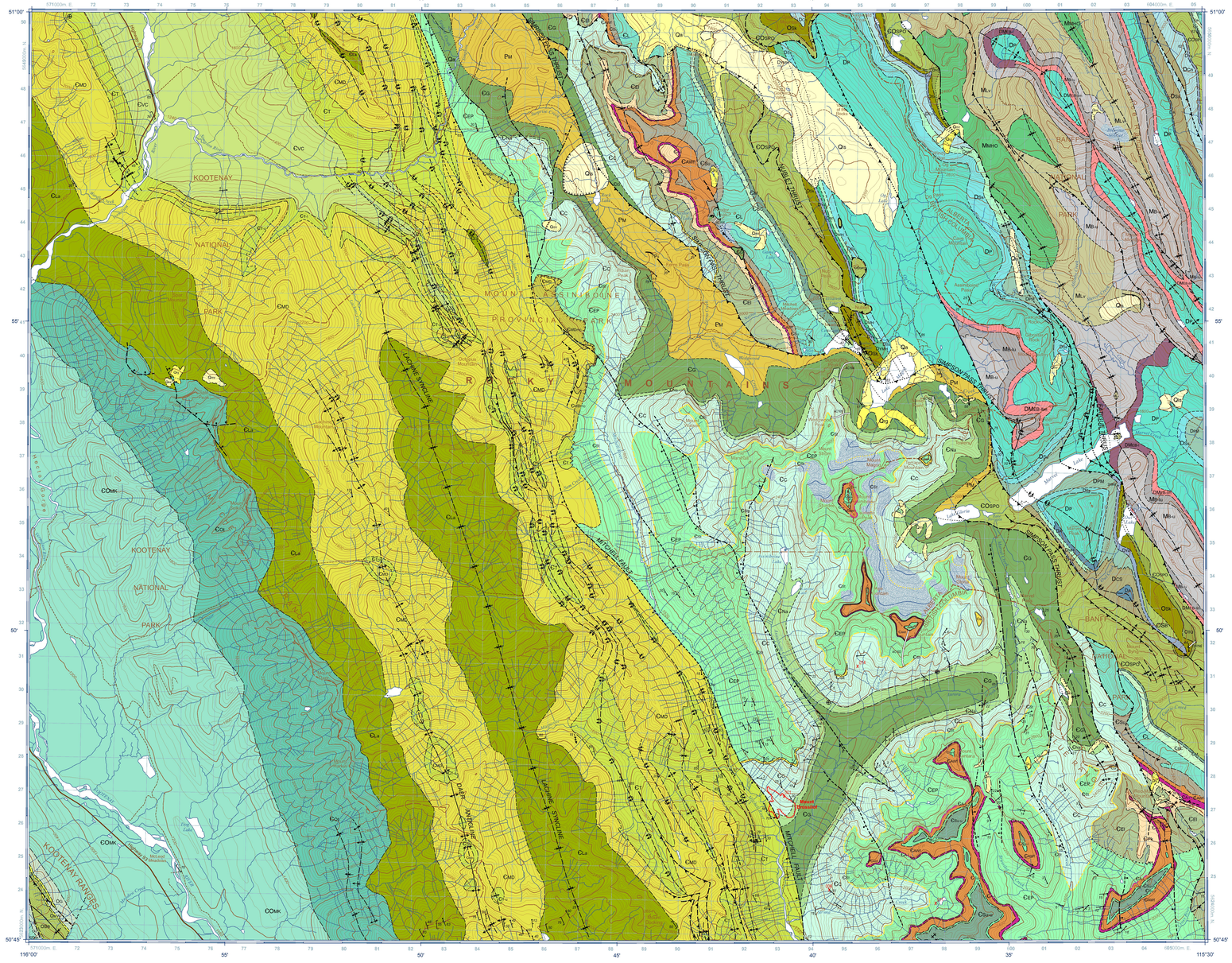
CANADIAN GEOSCIENCE MAP 13
GEOLOGY
MOUNT ASSINIBOINE
British Columbia • Alberta
1:50 000


116°00'
55'
50'
45'
40'
35'
115°30'
51°00'
50°45'
MOUNT ASSINIBOINE PROVINCIAL PARK
KOOTENAY NATIONAL PARK
BANFF NATIONAL PARK
ASSINIBOINE
Mount Assiniboine
Mount Magog
Mount Nestor
Mount Strom
Mount Sturdee
Mount Aye
Mount Gloria
Mount Brussilof
Mount Indefatigable
Mount Eon
Mount Birdwood
Mount Bident
Mount Sir Douglas
Mount Joffre
Mount Farnham
Mount Temple
Mount Hungabee
Mount Lefroy
Mount Victoria
Mount Goodsir
Mount Balfour
Mount Stanley
Mount Collie
Mount Ball
Mount Wardle
Mount Whymper
Mount Bryce
Mount Ogden
Mount Hector
Mount Gordon
Mount Daly
Mount Niblock
Mount Bosworth
Mount Ostrander
Mount Redoubt
Mount Richardson
Mount Bowlby
Mount Ptarmigan
Mount Wilson
Mount Whyte
Mount Bell
Mount Bogart
Mount Cory
Mount Edith
Mount Norquay
Mount Rundle
Mount Peechee
Mount Lougheed
Mount Allan
Mount Kidd
Mount Lorette
Mount Bourgeau
Mount Harkin
Mount Inglismaldie
Mount Sparrowhawk
Mount Fable
Mount Lawrence Grassi
Mount Edwards
Mount Girouard
Mount Stephen
Mount Dennis
Mount Field
Mount Burgess
Mount Wapta
Mount Odaray
Mount Habel
Mount Gosling
Mount Vaux
Mount Ogilvie
Mount Daer
Mount Balkwill
Mount Collier
Mount Thompson
Mount Murchison
Mount Forbes
Mount Lyell
Mount Alexandra
Mount Saskatchewan
Mount Wilcox
Mount Amery
Mount Athabasca
Mount Andromeda
Mount Kitchener
Mount Columbia
Mount Bridgland
Mount Alverstone
Mount Outram
Mount Woolley
Mount Sarbach
Mount Coleman
Mount Murray
Mount Fryatt
Mount Unwin
Mount Edith Cavell
Mount Tekarra
Mount Clitheroe
Mount Kerkeslin
Mount Hardisty
Mount Geikie
Mount Wilson
Mount Saint Piran
Mount Hooker
Mount Christie
Mount Fitzwilliam
Mount Cuthbert
Mount Tuzo
Mount Ramparts
Mount Chown
Mount Brazeau
Mount Hamel
Mount Fay
Mount Robson
Mount Resplendent
Mount Clark
Mount Longstaff
Mount Edith
Mount Hardy
Mount Sir Alexander
Mount Maligne
Mount Unna
Mount Charlton
Mount Tonquin
Mount Geraldine
Mount Cockscomb
Mount Wheeler
Mount Fitzgerald
Mount Kane
Mount Sir Sandford
Mount Cheadle
Mount Donkin
Mount Selwyn
Mount Jacques Cartier
Mount Dawson
Mount Brock
Mount Lambert
Mount Tupper
Mount Hermann
Mount Albert Edward
Mount Foch
Mount Lyautey
Mount Joffre
Mount Hayes
Mount Sir Wilfrid Laurier
Mount Robertson
Mount Sir Arthur Currie
Mount Sir Arthur Pearson
Mount Sir Arthur Sifton
Mount Sir Arthur Lawrence Sifton
Mount Sir Arthur Meighen
Mount Sir Arthur Lawrence Meighen
Mount Sir Arthur Lawrence Sifton