



**LEGEND**  
SEDIMENTARY AND VOLCANIC ROCKS

- PLEISTOCENE AND RECENT**  
Q Alluvium, glacial drift
- OLIGOCENE**  
O Sedimentary rocks: sandstone, conglomerate
- PALEOCENE AND EOCENE**  
E Sedimentary rocks: sandstone, shale, conglomerate; coal measures
- TERTIARY**  
Tv Mainly volcanic rocks: basalt, andesite. May include some Upper Cretaceous rocks  
Ts Mainly sedimentary rocks: sandstone, shale, conglomerate; coal measures
- UPPER CRETACEOUS**  
Ku Mainly sedimentary rocks: shale, sandstone, conglomerate; marine and non-marine; oil and natural gas, coal, bentonite
- LOWER CRETACEOUS**  
Kl Mainly sedimentary rocks: sandstone, shale, conglomerate; marine and non-marine; oil and natural gas, coal, tar sand. Includes some Triassic and Jurassic beds south of Peace River
- CRETACEOUS (Undivided)**  
K Sedimentary rocks
- JURASSIC AND CRETACEOUS**  
JK Undivided Jurassic and Lower Cretaceous in Rocky Mountains
- JURASSIC**  
J Sedimentary and volcanic rocks: argillite, greywacke, sandstone, limestone; andesite, volcanic breccia, tuff. Includes considerable Lower Cretaceous and some Triassic rocks. Oil in Alberta and Saskatchewan
- TRIASSIC**  
R Sedimentary and volcanic rocks: argillite, quartzite, limestone; andesite, volcanic breccia, tuff. Includes some Palaeozoic limestone in southwestern Yukon Territory. Natural gas at Fort St. John
- MESOZOIC (Undivided)**  
M Sedimentary and volcanic rocks; some coal measures. Includes some Palaeozoic in Yukon Territory
- CARBONIFEROUS AND PERMIAN**  
C Sedimentary and volcanic rocks: argillite, cherty argillite; limestone, quartzite; andesite, volcanic breccia, tuff
- PENNSYLVANIAN**  
Cp Mainly sedimentary rocks: sandstone, shale, conglomerate; some volcanic rocks; coal measures
- MISSISSIPPIAN**  
Cm Mainly sedimentary rocks: limestone, shale, sandstone, conglomerate; volcanic rocks; gypsum, anhydrite; oil and natural gas
- DEVONIAN AND CARBONIFEROUS**  
DC Sedimentary rocks: limestone, dolomite, shale, gypsum, anhydrite; oil and natural gas. Includes some Cambrian and Triassic in Rocky Mountains
- DEVONIAN**  
D Sedimentary and volcanic rocks: shale, limestone, dolomite; conglomerate, sandstone; volcanic rocks; salt; oil and natural gas
- SILURIAN**  
S Mainly sedimentary rocks: sandstone, shale, limestone, dolomite; conglomerate; some volcanic rocks; gypsum, salt; oil and natural gas
- ORDOVICIAN**  
O Sedimentary rocks: limestone, dolomite, shale, argillite, sandstone, quartzite, grit; oil and natural gas
- ORDOVICIAN AND SILURIAN**  
O Sedimentary rocks
- CAMBRIAN**  
C Sedimentary rocks: dolomite, limestone, shale, chert, quartzite; sandstone, conglomerate
- PALAEZOIC (Undivided)**  
P Mainly sedimentary rocks. May include some Mesozoic and Precambrian rocks in northern Cordillera
- LATE PROTEROZOIC**  
Eu Sedimentary and volcanic rocks: sandstone, quartzite, conglomerate, shale; basalt. Includes younger rocks in Yukon Territory  
Eus Sedimentary and volcanic rocks and derived metamorphic rocks: argillite, quartzite, limestone; schist, gneiss, crystalline limestone; andesite, greenstone. May be in part Palaeozoic
- EARLY PROTEROZOIC**  
Ei Sedimentary and volcanic rocks: shale, argillite, slate, chert; limestone, dolomite (algal structures); sandstone, quartzite, arkose, greywacke, conglomerate; andesite, basalt, trachyte; tuff; volcanic breccia; iron formation. Also, Grenville
- PROTEROZOIC (Undivided)**  
P Sedimentary and volcanic rocks
- ARCHÆAN**  
As Mainly sedimentary and derived metamorphic rocks: argillite, slate, arkose, quartzite, greywacke, conglomerate; sedimentary gneiss and schist; iron formation. Also, Grenville  
Av Mainly volcanic and derived metamorphic rocks: andesite, dacite, basalt; rhyolite, trachyte; minor volcanic breccia and tuff; greenstone schist, hornblende gneiss
- ARCHÆAN (Undivided)**  
A Sedimentary, volcanic, and metamorphic rocks

- INTRUSIVE ROCKS**
- MESOZOIC AND CENOZOIC**  
6 Acid rocks: granodiorite, quartz monzonite, quartz diorite; granite, syenite  
5 Basic and ultrabasic rocks: gabbro, pyroxenite, peridotite
- PALAEZOIC**  
5 Acid, basic, and ultrabasic rocks: granite, and related rocks; peridotite, pyroxenite, gabbro; serpentine, asbestos deposits
- PROTEROZOIC**  
4 Acid rocks: granite; granodiorite, diorite; gneissic rocks in Yukon Territory  
3 Basic rocks: diabase sills and dykes
- ARCHÆAN AND/OR PROTEROZOIC**  
2 Mainly acid rocks: granodiorite, granite, quartz diorite; granite gneiss. Includes much granitized sedimentary and volcanic rock. Represents undivided Precambrian in lesser known parts of Canadian Shield  
1 Basic and ultrabasic rocks: mainly anorthosite and gabbro

Geology derived from published and unpublished maps and reports of the Geological Survey of Canada, Provincial Departments of Mines, mining companies, and other sources. Cartography by the Geological Cartography Division, 1954.

CANADA  
DEPARTMENT  
OF  
MINES AND TECHNICAL SURVEYS  
GEOLOGICAL SURVEY OF CANADA

MAP 1045A

**GEOLOGICAL MAP  
OF  
CANADA**

SCALE: 1 INCH TO 120 MILES = 7603200

MILES 0 100 200 300 400  
KILOMETRES 0 100 200 300 400 500