

QUATERNARY  
PLEISTOCENE AND RECENT

**Qd–Qr** Sand, gravel, and alluvium.

CRETACEOUS

UPPER CRETACEOUS  
ALBERTA GROUP (Kbk–KBz)

**KBz** BRAZEAU FORMATION: greenish-grey sandstone, conglomeratic sandstone, shale, minor volcanic tuff, and coal seams.

UPPER WAPIABI FORMATION  
**KWpu** NOMAD MEMBER: dark grey, rusty-weathering shale grading into olive-brown to greenish-brown shale, argillaceous siltstone, and sandstone.  
CHUNGO MEMBER: fine-grained, brown-weathering sandstone.

LOWER WAPIABI FORMATION  
**KWpl** HANSON MEMBER: blocky to rubbly, sideritic, rusty-weathering concretionary shale.  
THISTLE MEMBER: fissile to platy, dark grey to black, grey-weathering, calcareous shale.  
DOWLING MEMBER: concretionary, sideritic shale.  
MARSHYBANK MEMBER: massive argillaceous siltstone.  
MUSKIKI MEMBER: rubbly and flaky sideritic shale.

**KCa** CARDIUM FORMATION: grey sandstone, siltstone, shale, and conglomerate.

**KBk** BLACKSTONE FORMATION: dark grey, fissile, silty, concretionary shale; siltstone.  
OPABIN MEMBER: silty mudstone with large, reddish-brown, sideritic concretions.  
HAVEN MEMBER: platy rubbly shale and thin siltstone, abundant pyrite.  
VIMY MEMBER: silver-grey-weathering calcareous shale and yellow beds of buff, argillaceous dolomitic limestone.  
SUNKAY MEMBER: basal rusty shale, siltstone, and coarse-grained sandstone.

LOWER CRETACEOUS  
LUSCAR GROUP (Kcd–KMP)

**KMP** GATES FORMATION, MOUNTAIN PARK MEMBER: massive green sandstone and conglomeratic sandstone; shale and silty shale.

**KLuu** GATES FORMATION, TORRENS AND GRANDE CACHE MEMBERS: sandstone, siltstone, silty mudstone; coal in Rocky Mountain Foothills.

**KLul** GLADSTONE AND MOOSEBAR FORMATIONS: silty mudstone, siltstone, and sandstone; coal in Pocahontas basin, contains brackish to marine fauna.

**KCd** **KCd** CADOMIN FORMATION: chert- and quartzite-pebble conglomerate and conglomeratic sandstone.

LOWER CRETACEOUS AND JURASSIC

**JN** NIKANASSIN FORMATION: dark grey, silty mudstone, siltstone, and sandstone.

JURASSIC

**JF** FERNIE FORMATION: dark grey to black shale; dark grey sandstone and siltstone; dark grey, silty, argillaceous limestone; brown limonitic, quartz sandstone.

TRIASSIC

**TWh** SPRAY RIVER GROUP (TSM–TWh)  
WHITEHORSE FORMATION: siltstone and sandstone, dolomitic, light grey; mudstone and siltstone, red, green, and brown; limestone and dolomite solution breccia.

**TSM** SULPHUR MOUNTAIN FORMATION: marine siltstone and sandstone, dark grey and brown, thin-bedded silty mudstone, shale, and dolomitic siltstone.

PERMIAN AND/OR PENNSYLVANIAN

**PI** **PI** ISHBEL GROUP: light grey quartz sandstone; dolomitic sandstone; silty dolomite; chert.

MISSISSIPPIAN

**MTM** RUNDLE GROUP (MPS–MTM)  
MOUNT HEAD FORMATION: dense, dark grey limestone and argillaceous dolomite; grey limestone and calcarenitic limestone, cherty and silty dolomite and limestone.  
TURNER VALLEY FORMATION: light grey, skeletal calcarenitic and calcarenitic limestone; cherty limestone; dolomite.

**MPS** SHUNDA FORMATION: light to dark grey, dense limestone; calcarenitic limestone; cherty limestone.  
PEKISKO FORMATION: light grey crinoidal calcarenites; calcarenitic limestone; cherty limestone; dolomite.

**MBf** BANFF FORMATION: dark grey, finely crystalline, thin-bedded limestone; dark brownish-grey shale; brown, argillaceous siltstone, argillaceous and cherty skeletal calcarenitic limestone, and argillaceous dolomite. Dark brown shale at the base.

**MEx** EXSHAW FORMATION: black, cherty, fissile shale, brown; fine-grained, quartz sandstone.

DEVONIAN

**DPa** PALLISER FORMATION: thick-bedded and massive, mottled dolomitic limestone; grey, dense limestone, greyish-brown dolomite.

**DSs** **DSs** SASSENACH FORMATION: sandstone and siltstone, fine-grained, medium-bedded; limestone, silty and argillaceous; dark grey, silty, calcareous shale.

FAIRHOLME GROUP (DCn–DSx, DFI–DMH)

**DSx** SOUTHESK FORMATION: massive, light grey, crypto- to fine-crystalline limestone, in part calcarenitic; dolomite.

**DSxA** SOUTHESK FORMATION, ARCS MEMBER: massive, medium brown-grey, fine-crystalline, nonorganic dolomite.

**DCn** CAIRN FORMATION: massive to thick-bedded, dark brownish-grey, medium-crystalline dolomite with Amphipora and stromatoporoid beds; dark grey limestone with dolomitic limestone and dolomite in the lower part; minor chert and breccia.

LOWER ORDOVICIAN AND/OR UPPER CAMBRIAN

**COsp** SURVEY PEAK FORMATION: shale, grey, calcareous; interbedded with limestone, micritic, minor chert; basal part shale, calcareous grey to olive, with minor limestone, flat-pebble conglomerate, siltstone; weathers pale greenish grey. Figure 3 only.

CAMBRIAN  
UPPER CAMBRIAN

**CLx** UPPER LYNX GROUP: dolomite, mainly grey mottled, microcrystalline, silty, grading to dolomitic siltstone; commonly laminated, thin- to thick-bedded; chert nodules.

**CSu** SULLIVAN FORMATION: grey to green shale with thick interbeds of oolitic and fossiliferous limestone, limestone-pebble conglomerate, and orange-weathering dolomite; dolomitic siltstone near the base. Figures 1, 2, and 3 only.

MIDDLE AND UPPER CAMBRIAN

**CPAW** WATERFOWL FORMATION: grey to pink, very finely crystalline to microcrystalline dolomite, partly silty and sandy, laminated, thin- to thick-bedded; minor dolomitic siltstone; chert nodules.  
ARCTOMYS FORMATION: thinly interbedded, purple-red, green, and grey shale; yellow dolomitic siltstone with ripple marks, mudcracks, and salt casts; and minor yellow-weathering dolomite.  
PIKA FORMATION: grey, dense, thin-bedded, flaggy limestone with partings and mottling of dense dolomite; limestone-pebble conglomerate; oolite; dolomitized equivalents; minor shale intervals near the base.

**CEI** ELDON FORMATION: dense, predominantly grey, dolomite-mottled, massive limestone; dolomitized equivalent.

**CSI** SNAKE INDIAN FORMATION: alternating units of limestone and calcareous shale; micritic, resistant, grey, thin-bedded and flaggy limestone, variable dolomitization; calcareous, grey, recessive shale; silty, red and green shale and siltstone at the base.

**CG** GOG GROUP: quartz sandstone. Figures 1 and 2 only.

NEOPROTEROZOIC

**PM** MIETTE GROUP: gritty sandstone; shale; sandy pebble conglomerate; siltstone. Figure 3 only.



OFF-REEF BASIN FILL

**DMH** MOUNT HAWK FORMATION: mudstone, calcareous, with limestone nodules, grey to brown; limestone, argillaceous with brachiopods and corals; thin-bedded, recessive.

**DPx** PERDRIX FORMATION: shale, black, bitumous, calcareous, pyritic, with calcareous nodules; thin beds of limestone, dark grey, argillaceous.

**DFI** **DFI** MALIGNE FORMATION: limestone, micritic, argillaceous, dark grey, thin-bedded with brachiopods.  
FLUME FORMATION: limestone, fine-grained to micritic, cherty, dark grey to brown, in part dolomitic, with Amphipora and stromatoporoids.

NOTE: DMH, DPx, and DFI represent strata deposited basinward from the Cairn and Southesk formations, which represent reef-fringed, carbonate buildups.

**DFa** FAIRHOLME GROUP: Figure 3 only.

**Є** CAMBRIAN, undivided. Figures 1 and 2 only.