

Post-Ordovician Units

Overlap Sequences

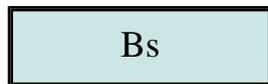
Stratified rocks

Quaternary



Surficial deposits

Carboniferous (Visean to Westphalian)



Fluviatile and lacustrine, siliciclastic and minor carbonate rocks; intercalated marine, siliciclastic, carbonate and evaporitic rocks; minor coal beds and mafic volcanic flows

Devonian and Carboniferous (Tournaisian)



Fluviatile and lacustrine, siliciclastic and carbonate rocks; subaerial, bimodal volcanic rocks; may include some Late Silurian rocks



Fluviatile and lacustrine sandstone, shale, conglomerate and minor carbonate rocks

Silurian and Devonian



Shallow marine sandstone, conglomerate, limey shale and thin-bedded limestone

Silurian



Bimodal to mainly felsic subaerial volcanic rocks; includes unseparated sedimentary rocks of mainly fluviatile and lacustrine facies; minor marine mafic volcanic rocks



Shallow marine and non-marine siliciclastic sedimentary rocks, including sandstone, shale and conglomerate

Intrusive Rocks

Various ages



Quartz veins of various ages

Mesozoic



Gabbro and diabase

Devonian and Carboniferous



Granite and high silica granite (sensu stricto), and other granitoid intrusions that are posttectonic relative to mid-Paleozoic orogenies

Silurian and Devonian



Gabbro and diorite intrusions, including minor ultramafic phases



Posttectonic gabbro-syenite-granite-peralkaline granite suites and minor unseparated volcanic rocks (northwest of Red Indian Line); granitoid suites, varying from pre-tectonic to syntectonic, relative to mid-Paleozoic orogenies (southeast of Red Indian Line)

Laurentian Margin

Humber Zone (Shelf and Related Rocks)

Stratified rocks

Middle Ordovician



Shallow marine limestone, shale and sandstone

Early and Middle Ordovician



Foreland basin facies deposited on shelf sequence: sandstone and shale turbidites, and carbonate breccia; calcareous and black shale, carbonate breccia and conglomerate



Shelf facies and marginal facies of foreland basin: limestone and dolostone

Cambrian



Shelf facies: thin bedded limestone, dolostone and shale

Neoproterozoic and Cambrian



Rift and transitional shelf facies: non-marine conglomerate, sandstone and mafic volcanic rocks; marine shale, sandstone, limestone, dolostone and limestone conglomerate

Neoproterozoic to Middle Ordovician



Undivided siliciclastic and carbonate rocks; excludes siliciclastic rocks west of Long Range Mountains

Intrusive rocks

Neoproterozoic



Granitoid intrusions



Mafic dykes

Basement rocks

Paleoproterozoic(?) and Mesoproterozoic



Granitoid intrusions



Mafic and anorthositic intrusions



Granitoid orthogneiss and subordinate mafic gneiss and paragneiss

Humber Zone (Slope and Related Rocks)

Stratified rocks

Early and Middle Ordovician



Shale-matrix melange, containing blocks of ophiolitic, rift, continental slope and foreland basin rocks



Foreland basin facies deposited on allochthonous slope sequence: sandstone and shale turbidites, and carbonate breccia

Cambrian to Middle Ordovician

COsl

Continental slope facies: (within Taconian allochthons) sandstone, shale, thin-bedded to conglomeratic carbonate rocks, chert, mafic volcanic and minor metamorphic rocks; (within autochthon) metamorphic equivalents, including unseparated rocks of Middle Ordovician foreland basin and Neoproterozoic to Cambrian rift facies

Neoproterozoic and Cambrian

NCrs

Rift and transitional continental slope facies: (within Taconian allochthons) sandstone, shale, conglomerate and mafic volcanic rock; (within autochthon) metamorphic equivalents, including unseparated probable basement rocks and Cambrian to Ordovician rocks of continental slope and foreland basin facies

Iapetus Ocean

Dunnage Zone (Notre Dame Subzone)

Stratified rocks

Middle Ordovician

Osp

Breccia, shale and sandstone

Cambrian to Middle Ordovician

COsn

Marine siliciclastic sedimentary rocks, including slate, shale, argillite, siltstone, sandstone, conglomerate, and minor unseparated carbonate, volcanic and intrusive rocks, and schist, gneiss and migmatite

COvn

Submarine mafic, intermediate and felsic volcanic rocks, including mafic volcanic rocks of ophiolite complexes; includes unseparated intrusive, sedimentary and metamorphic rocks

Intrusive rocks

Cambrian and Ordovician

COgn

Granitoid intrusions, including plagiogranite of ophiolite complexes and minor unseparated Neoproterozoic intrusions



Mafic intrusions, including unseparated granitoid rocks, and gabbro, diabase and plagiogranite of ophiolite complexes



Ultramafic rocks of ophiolite complexes

Dunnage Zone (Exploits Subzone)

Stratified rocks

Late Ordovician and Early Silurian



Melange, containing volcanic and sedimentary blocks of Middle and Late (?) Ordovician age



Turbidites consisting of sandstone, shale and conglomerate; other marine sedimentary rocks

Middle and Late Ordovician



Llandeilo to Ashgill black shale, slate and argillite, including subordinate chert and greywacke

Cambrian to Middle Ordovician



Melange, containing sedimentary and volcanic blocks of Cambrian to Ordovician age



Marine siliciclastic sedimentary rocks, including slate, shale, argillite, siltstone, sandstone, conglomerate, and minor unseparated carbonate, volcanic and intrusive rocks, and schist, gneiss and migmatite



Submarine mafic, intermediate and felsic volcanic rocks, including mafic volcanic rocks of ophiolite complexes; includes unseparated intrusive, sedimentary and metamorphic rocks

Intrusive rocks

Cambrian and Ordovician



Granitoid intrusions, including plagiogranite of ophiolite complexes and minor unseparated Neoproterozoic intrusions



Mafic intrusions, including unseparated granitoid rocks, and gabbro, diabase and plagiogranite of ophiolite complexes



Ultramafic rocks of ophiolite complexes

Gondwanan Margin

Gander Zone

Stratified rocks

Cambrian(?) and Ordovician



Quartzite, psammite, semipelite and pelite, including minor black slate, conglomerate, limestone, mafic and felsic volcanic rocks, and unseparated migmatitic rocks



Migmatitic schist, gneiss, and minor amphibolite, derived in whole or in part from Cambrian(?) and Ordovician protoliths

Intrusive rocks

Ordovician



Granite intrusions



Mafic intrusions and amphibolite

Avalon Zone (Internal)

Stratified rocks

Neoproterozoic and Cambrian



Siliciclastic sedimentary and volcanic rocks; amphibolitic and quartzofeldspathic schist, gneiss and migmatite; includes unseparated granitoid and gabbroic intrusions

Intrusive rocks

Neoproterozoic and Cambrian



Mafic intrusions



Granitoid intrusions

Avalon Zone (External)

Stratified rocks

Neoproterozoic to Early Ordovician

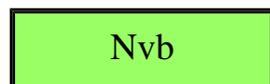


Shallow marine, mainly fine grained, siliciclastic sedimentary rocks, including minor unseparated limestone and volcanic rocks

Neoproterozoic



Fluviatile and shallow marine siliciclastic sedimentary rocks, including minor unseparated limestone and bimodal volcanic rocks



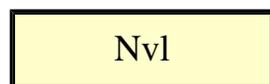
Bimodal, mainly subaerial volcanic rocks, including unseparated siliciclastic sedimentary rocks



Marine deltaic siliciclastic sedimentary rocks



Sandstone and shale turbidites, including minor unseparated tillite, olistostromes and volcanic rocks



Bimodal, submarine to subaerial volcanic rocks, including minor siliciclastic sedimentary rocks



Pillow basalt, mafic volcanoclastic rocks, siliciclastic sedimentary rocks, and minor limestone and chert

Intrusive rocks

Neoproterozoic to Cambrian



Mafic intrusions



Granitoid intrusions, including unseparated mafic phases