

**SEDIMENTARY ROCKS**

**TERTIARY**

**LATE TERTIARY**

16 Volcanic-cobble conglomerate, sandstone and mudstone.

**CRETACEOUS**

**LATE CRETACEOUS and EARLY TERTIARY**

15 Chert-quartz pebble conglomerate, volcanic pebble conglomerate, sandstone, siltstone and mudstone; minor coaly lenses.

13 B volcanic-chert-quartz pebble conglomerate, sandstone, siltstone and mudstone.

A red bed assemblage, silty and sandy mudstone and fine sandstone; minor coarse sandstone and chert-volcanic pebble conglomerate.

**CRETACEOUS**

**EARLY & MIDDLE CRETACEOUS**

10 Skeena Group (10 & 11) B nodular and concretionary pyritic black shale; minor sandstone and siltstone lenses.

A alluvium, chert pebble conglomerate, feldspar-lithic chert sandstone, siltstone and mudstone; minor coaly seams.

**JURASSIC**

**HAZELTON GROUP (4 to 8)**

8 B feldspathic greywacke, silty argillite, argillaceous siltstone; minor sandstone and conglomerate.

Aa volcanoclastic sandstone, siltstone and mudstone, granitic-volcanic cobble conglomerate; minor shale and argillaceous coal beds.

Am shallow water volcanic sandstone, siltstone and argillite; minor conglomerate, pelocypid coquina common.

7 Distal feldspathic wacke and greywacke, silty argillite, limey concretionary argillite; minor argillaceous-carbonaceous limestone and sandstone.

6 B volcanic-feldspathic greywacke grit, silty argillite; minor sharpstone volcanic pebble conglomerate and tuff.

A volcanoclastic, feldspathic and glauconitic sandstone; minor volcanic pebble conglomerate and red tuff.

5 B silty argillite, black shale volcanic-lithic sandstone and greywacke, cherty tuff; minor chert, limestone and sharpstone-pebble conglomerate.

4 A black shale, silty argillite, laminated volcanic-lithic greywacke, blue-grey tuff, ash fall tuff, nodular limestone tuff; minor acid breccia, green breccia and tuff, and sharpstone pebble conglomerate; diabase sills common, section rusty weathering.

**PENNSYLVANIAN and PERMIAN**

**CACHE CREEK GROUP (2)**

2 foliated argillite, greenstone, limestone, interlayered serpentinite

**PERMIAN and OLDER**

1 Metaconglomerate, metapelite, lime pelite, marble, epidote-amphibolite metamorphic facies

**INTRUSIVE ROCKS**

**MIDDLE TERTIARY**

**BABINE INTRUSIONS**

D Biotite porphyry, biotite-feldspar porphyry.

1b hornblende porphyry, hornblende-feldspar porphyry, hornblende-biotite-feldspar porphyry.

1g fine-grained hornblende-biotite tonalite, granodiorite and quartz monzonite; minor granophyre.

1 undifferentiated, altered felsite porphyry, biotite-hornblende-feldspar porphyry and intermediate quartz porphyry.

**KASTBERG INTRUSIONS**

D Leucocratic, microplitic biotite-feldspar porphyry, quartz-eye porphyry, hornblende-feldspar porphyry and felsite.

**LATE CRETACEOUS to EARLY TERTIARY**

C 1g altered, fine-grained gabbro, diabase and quartz gabbro.

1q fine-grained tonalite, trochilite, and granodiorite; generally altered.

C 2r rhyolite, felsite, biotite-quartz porphyry and subvolcanic acid breccia.

2g microdiarite and microgabbro.

C 3 augite-feldspar porphyry and bladed feldspar porphyry.

C 4 gabbro, diorite and minor granodiorite and granite.

**EARLY CRETACEOUS**

B 1 tonalite, granodiorite and monzonite

2 biotite-feldspar-quartz porphyry.

**EARLY JURASSIC or CRETACEOUS**

A Alkali gabbro, diabase, tonalite and monzonite.

**VOLCANIC ROCKS**

**OOTSA LAKE GROUP (14)**

14 Rhyolite, quartz-eye porphyry, felsite, acidic tuff and breccia; minor basalt and andesite.

12 Augite porphyry, bladed feldspar porphyry and feldspar porphyry flow, breccia, lahar and tuff; minor rhyolite and sandstone.

11 Subareol andesite-dacite feldspar-augite porphyry flow, breccia and lapilli tuff; minor basalt flow and dacite-rhyolite tuff and breccia; volcanic sandstone and mudstone.

m Marine and non-marine basalt andesite flow, breccia and tuff, acid to intermediate feldspar porphyry trachyte flow, breccia and tuff, and greywacke; minor volcanic pebble conglomerate, shale and limestone.

**MIDDLE & LATE JURASSIC**

**EARLY & LATE OXFORDIAN**

9 Subareol feldspar-augite basalt-andesite porphyry flow, breccia, lahar, and tuff; feldspar porphyry breccia and tuff, red lapilli tuff, and red breccia; minor acid pyroclasts, volcanic sandstone and coaly seams.

**CALLOVIAN & EARLY OXFORDIAN**

4 Cm marine basalt-andesite laminated green tuff and breccia, amygdaloidal flow, limestone, limestone-volcanic breccia, minor dacite-rhyolite breccia, tuff, greywacke and argillite.

Ca subareol feldspathic red tuff, lapilli tuff and breccia, amygdaloidal basalt flow, andesite-dacite agglomerate, breccia and lahar, dacite-rhyolite tuff and breccia, volcaniclastic sandstone, siltstone and mudstone.

**EARLY & MIDDLE BAJOCCIAN**

4 Bm marine basalt-andesite green tuff, breccia, amygdaloidal flow, limestone, limestone-volcanic breccia, diabase, rhyolite breccia and tuff.

Ba subareol augite andesite flow and breccia, red lapilli tuff and breccia; minor dacite-rhyolite ash-flow tuff, volcaniclastic pebble conglomerate, sandstone and mudstone.

**EARLY & MIDDLE JURASSIC**

**MIDDLE TOARCIAN TO MIDDLE BAJOCCIAN**

4 Am marine basalt-andesite green laminated tuff and breccia, broken pillow breccia, limestone, limestone-volcanic breccia, amygdaloidal flow and diabase, dacite-rhyolite breccia and tuff, greywacke, argillite and sharpstone greywacke conglomerate.

Aa subareol feldspathic red tuff, lapilli tuff and breccia, amygdaloidal basalt flow, basalt-andesite agglomerate, lahar, dacite rhyolite ignimbrite breccia and tuff, granite-volcanic cobble conglomerate, tuff, sandstone and mudstone.

**LATE SINEMURIAN TO MIDDLE TOARCIAN**

4 Bm marine basalt-andesite green tuff, breccia, amygdaloidal flow, limestone, limestone-volcanic breccia, diabase, rhyolite breccia and tuff.

Ba subareol augite andesite flow and breccia, red lapilli tuff and breccia; minor dacite-rhyolite ash-flow tuff, volcaniclastic pebble conglomerate, sandstone and mudstone.

**LATE SINEMURIAN**

4 Am marine basalt-andesite green laminated tuff and breccia, broken pillow breccia, limestone, limestone-volcanic breccia, amygdaloidal flow and diabase, dacite-rhyolite breccia and tuff, greywacke, argillite and sharpstone greywacke conglomerate.

Aa subareol feldspathic red tuff, lapilli tuff and breccia, amygdaloidal basalt flow, basalt-andesite agglomerate, lahar, dacite rhyolite ignimbrite breccia and tuff, granite-volcanic cobble conglomerate, tuff, sandstone and mudstone.

**TAKLA GROUP (3)**

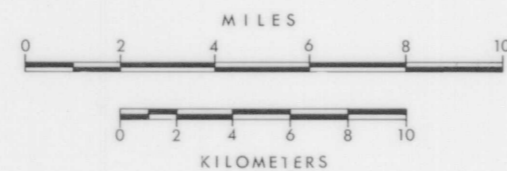
J Augite-feldspar porphyry flow, breccia and tuff, limestone, limestone-volcanic breccia, black shale and greywacke.



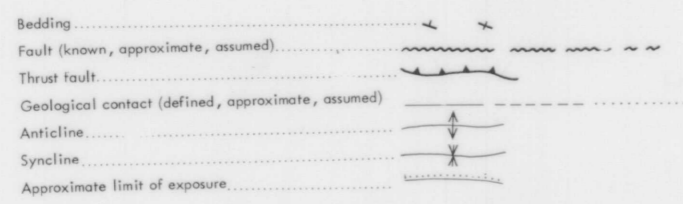
Magnetic declination, 27° 00' (1969), annual change decreasing 0.3°

Geology by T. Richards (1972, 1973)

Geology in part after N.C. Carter, British Columbia Department of Mines



**HAZELTON EAST HALF (93M east)**



Contour interval ..... 500 ft.

