

PRELIMINARY GEOLOGIC MAP OF NELSON (N.T.S. 82F WEST HALF) MAP AREA, BRITISH COLUMBIA

Compiled by: H. W. LITTLE

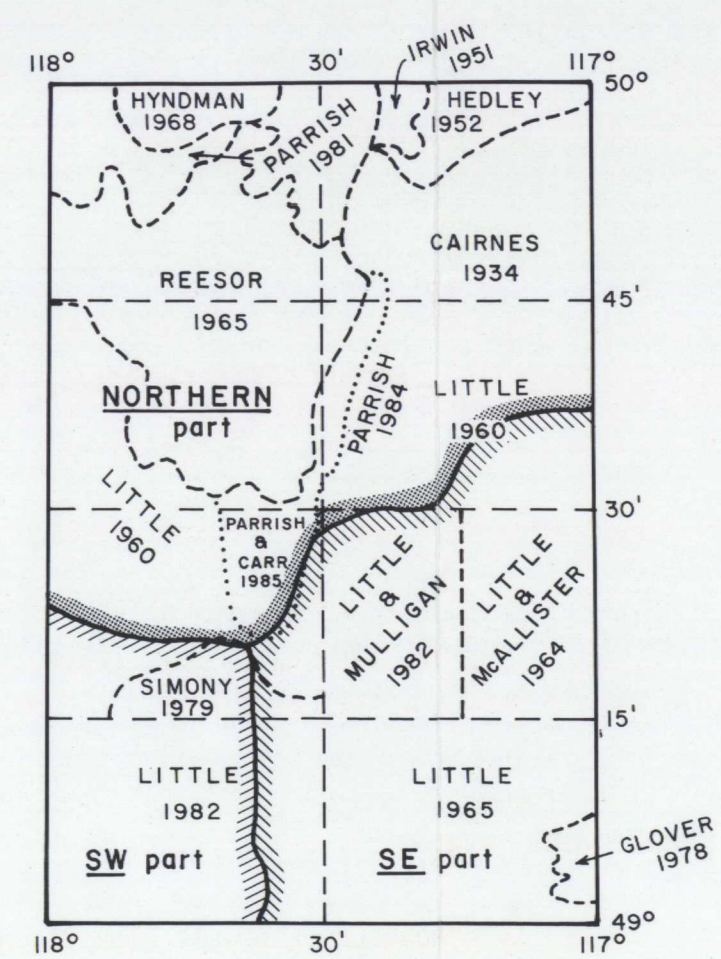
- NORTHERN PART
- QUATERNARY
Q UNCONSOLIDATED SEDIMENTS: TILL, SAND, GRAVEL, SILT
- TERTIARY
 EOCENE
 MIDDLE EOCENE
Ec CORYELL INTRUSIONS: MONZONITE, QUARTZ MONZONITE, SYENODIORITE
- JURASSIC
Jn NELSON INTRUSIONS: PORPHYRITIC GRANITE AND GRANDIORITE; GRANDIORITE, DIORITE, QUARTZ DIORITE, HORNBLLENDE SYENITE
- TRIASSIC AND(?) LOWER JURASSIC
Ts SLOCAN GROUP: SLATE, ARGILLITE, LIMESTONE, CONGLOMERATE, TUFF
- PERMIAN
Pk KASLO GROUP: ANDESITE, DACITE, MINOR TUFFACEOUS SEDIMENTS, AMPHIBOLITE
- CARBONIFEROUS
Cm MILFORD(?) GROUP: PELITIC SCHISTS, CALC-SILICATE ROCKS AND MINOR AMPHIBOLITE
- PENNSYLVANIAN(?)
Pmr MOUNT ROBERTS(?) FORMATION: ARGILLACEOUS QUARTZITE, LIMESTONE, GREYWACKE
- UPPER PALEOZOIC(?) TO EOCENE: (VALHALLA GNEISS COMPLEX, AFTER REESOR 1965, MODIFIED BY PARRISH ET AL 1985)
- TERTIARY
 PALEOCENE AND EOCENE
PEqm MAP-UNIT PEqm: BIOTITE QUARTZ MONZONITE
- PALEOCENE
PEmgn MAP-UNIT PEmgn ('MIXED GNEISS'): LEUCOGRANDIORITE AND LEUCOQUARTZ MONZONITE WITH INCLUSIONS, REMNANTS, AND EXTENSIVE LAYERS OF GNEISS AND SOME AMPHIBOLITE
- CRETACEOUS
 UPPER CRETACEOUS
UKgdgn VEINED AUGEN GRANODIORITE GNEISS UNIT: AUGEN GNEISS VEINED WITH LEUCOGRANDIORITE, LEUCOGRANITE, AND PEGMATITE
- PRE-MIDDLE JURASSIC
pmjhgn HYBRID GNEISS UNIT: LAYERED PARAGNEISS AND MIGMATITE
- AGE UNKNOWN
gn UNDIVIDED GNEISSES: MISCELLANEOUS LAYERED GNEISS, MIXED GNEISS, METAQUARTZITE, AND SCHIST, IN PLACES CONTAINING MUCH LEUCOGRANITIC MATERIAL

- SOUTHWEST PART
- QUATERNARY
Q UNCONSOLIDATED SEDIMENTS: TILL, SAND, GRAVEL, SILT
- TERTIARY
 EOCENE
 MIDDLE EOCENE
Ec CORYELL INTRUSIONS: SYENITE, MONZONITE, QUARTZ MONZONITE; BIOTITE-AUGITE MONZONITE
Es SHEPPARD INTRUSIONS: SODIC LEUCOGRANITE; MINOR SYENITE
Emv MARRON FORMATION: AUGITE AND/OR HORNBLLENDE AND/OR BIOTITE ANDESITE AND TRACHYANDESITE; BASALT(?); MINOR TUFF AND AGGLOMERATE
Ekp KETTLE RIVER FORMATION: TUFFACEOUS ARKOSE
- TERTIARY(?)
Ti MAP-UNIT Ti: HORNBLLENDE-FELDSPAR AND HORNBLLENDE PORPHYRIES OF DIORITIC COMPOSITION; TID, AREAS OF OUTCROPS ALMOST ENTIRELY OF DIORITIC DYKES
- CRETACEOUS(?)
Kgp MAP-UNIT Kgp: QUARTZ-FELDSPAR PORPHYRY
- CRETACEOUS
 UPPER CRETACEOUS
uksm SOPHIE MOUNTAIN FORMATION: COARSE CONGLOMERATE WITH MINOR INTERBEDS OF SILTSTONE AND ARENEOUS ARGILLITE
- JURASSIC
Jn NELSON INTRUSIONS: GRANODIORITE, QUARTZ DIORITE, DIORITE; LOCALLY MONZODIORITE AND TONALITE
Jnm ROSSLAND MONZONITE: BIOTITE-HORNBLLENDE-AUGITE MONZONITE, MAINLY MEDIUM GRAINED
- LOWER JURASSIC
Ljh HALL FORMATION: SOFT CARBONACEOUS SHALE, BUFF TO BROWN ARGILLACEOUS SANDSTONE, SOME SILTSTONE AND MINOR GREYWACKE
Lje ELISE FORMATION: ANDESITE AND BASALT FLOWS AND FLOW BRECCIA, AGGLOMERATE; MINOR SILTSTONE
Lja ARCHIBALD FORMATION: BLACK, HARD, BRITTLE LAMINATED SILTSTONE, COMMONLY TUFFACEOUS
- PENNSYLVANIAN(?)
P?um ULTRAMAFIC INTRUSIONS: SERPENTINITE; SOME DUNITE(?)
Pmn MOUNT ROBERTS FORMATION: BLACK SILTSTONE AND ARGILLACEOUS QUARTZITE, SLATE, GREYWACKE, CHERT, PEBBLE CONGLOMERATE, LAVA, LIMESTONE; PMRN, PARAGNEISS
- SILURIAN(?) DEVONIAN AND(?) CARBONIFEROUS
 MIDDLE AND UPPER DEVONIAN IN PART
Dpo 'PEND D'OREILLE SEQUENCE' OF YATES: BLACK ARGILLITE, GREY LIMESTONE; MINOR CHERT AND GREENSTONE
- AGE UNKNOWN
cgn CASTLEGAR GNEISS: LAYERED BIOTITE AND HORNBLLENDE-BIOTITE AUGEN GNEISS
rgn TRAIL GNEISS: LAYERED HORNBLLENDE GNEISS, BIOTITE-HORNBLLENDE QUARTZ DIORITE GNEISS, FOLIATED APLITE AND PEGMATITE, MASSIVE PEGMATITE, QUARTZ-FELDSPATHIC MICA SCHIST AND AMPHIBOLITE
gn UNDIVIDED GNEISSES: LAYERED GNEISS, SCHIST, HORNFELS, METAQUARTZITE

- SOUTHEAST PART
- QUATERNARY
Q UNCONSOLIDATED SEDIMENTS: TILL, SAND, GRAVEL, SILT
- TERTIARY
 EOCENE
 MIDDLE EOCENE
Ec CORYELL INTRUSIONS: Ec1, BASIC SYENITE; Ec2, AUGITE MONZONITE, MINOR PULASKITE, MCGREGOR INTRUSION: SHONKINITE
- CRETACEOUS OR TERTIARY
KTp MAP-UNIT KTp: PEGMATITIC GRANITE
- JURASSIC OR CRETACEOUS
Jski SILVER KING PORPHYRY: PORPHYRITIC HORNBLLENDE QUARTZ DIORITE,
- JURASSIC
Jn NELSON INTRUSIONS: GRANODIORITE, MAINLY; QUARTZ DIORITE, QUARTZ MONZONITE, DIORITE, HORNBLLENDE SYENITE, GRANITE
Jp MAP-UNIT Jp: PSEUDODIORITE; MINOR PYROXENE-BIOTITE-HORNBLLENDE ROCK
- LOWER JURASSIC
Ljh HALL FORMATION: ARGILLITE, SHALE, SILTSTONE, PHYLLITE; LOCALLY SOME VOLCANIC ROCKS AND PEBBLE CONGLOMERATE
Lje ELISE FORMATION: ANDESITE AND BASALT FLOWS AND FLOW BRECCIA, AGGLOMERATE; MINOR SILTSTONE AND AMPHIBOLITE
Lja ARCHIBALD FORMATION: SILTSTONE, ARGILLACEOUS QUARTZITE, ARGILLITE; MINOR TUFF AND LAVA
- SILURIAN(?) DEVONIAN AND(?) CARBONIFEROUS
 MIDDLE AND UPPER DEVONIAN IN PART
Dpo 'PEND D'OREILLE SEQUENCE' OF YATES: BLACK ARGILLITE, GREY LIMESTONE; MINOR CHERT, GREENSTONE AND PHYLLITE
- ORDOVICIAN
 LOWER AND(?) MIDDLE ORDOVICIAN
Oa ACTIVE FORMATION: BLACK SLATE AND ARGILLITE; MINOR LIMESTONE, DOLOMITE, AND ARGILLACEOUS QUARTZITE
- CAMBRIAN
 MIDDLE CAMBRIAN
men NELWAY FORMATION: CREAM WEATHERING GREY DOLOMITE; LIMESTONE AND ARGILLITE
- LOWER CAMBRIAN
Lel LAIB FORMATION: PHYLLITE, SCHIST, ARGILLACEOUS QUARTZITE; LIMESTONE
Ler RENO FORMATION (Ler): ARGILLACEOUS AND MICACEOUS QUARTZITE; MINOR PHYLLITE
Legr QUARTZITE RANGE FORMATION (Legr): WHITE, GREEN, AND PINKISH ORTHOQUARTZITE; MINOR CONGLOMERATE AND ARGILLITE
- HADRYNIAN
Hts THREE SISTERS FORMATION: GREEN AND GREY GRIT AND QUARTZITE; MINOR POLYMIC TIC CONGLOMERATE AND GREEN PHYLLITE
Hm MONK FORMATION: GREY TO GREEN ARGILLITE AND PHYLLITE; MINOR CONGLOMERATE AND LIMESTONE
Hiv IRENE VOLCANIC FORMATION (Hiv): GREENSTONE, LOCALLY PILLOWED; MINOR ARGILLITE AND LIMESTONE
Ht TOBY FORMATION (Ht): POLYMIC TIC CONGLOMERATE; MINOR ARGILLITE
- AGE UNKNOWN
gn UNDIVIDED GNEISSES: LAYERED GNEISS, SCHIST, HORNFELS, METAQUARTZITE

GEOLOGICAL SYMBOLS

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| GEOLOGICAL BOUNDARY (DEFINED, APPROXIMATE, ASSUMED) | |
| BEDDING, TOPS KNOWN (INCLINED, VERTICAL, OVERTURNED) | |
| BEDDING, TOPS UNKNOWN (INCLINED, VERTICAL) | |
| SCHISTOSITY (INCLINED, VERTICAL) | |
| FOLIATION IN IGNEOUS ROCKS AND LAYERED GNEISSES (INCLINED, VERTICAL) | |
| LINATION (PLUNGING) | |
| FAULT (DEFINED, APPROXIMATE, ASSUMED) | |
| THRUST FAULT (DEFINED, APPROXIMATE, ASSUMED) | |
| SLOCAN LAKE FAULT ZONE | |
| ANTICLINE (UPRIGHT, OVERTURNED) | |
| SYNCLINE (UPRIGHT, OVERTURNED) | |
| GLACIAL STRIAE (DIRECTION KNOWN, UNKNOWN) | |
| FOSSIL LOCALITY | |



Index map showing sources of data and areas to which legends apply.

