

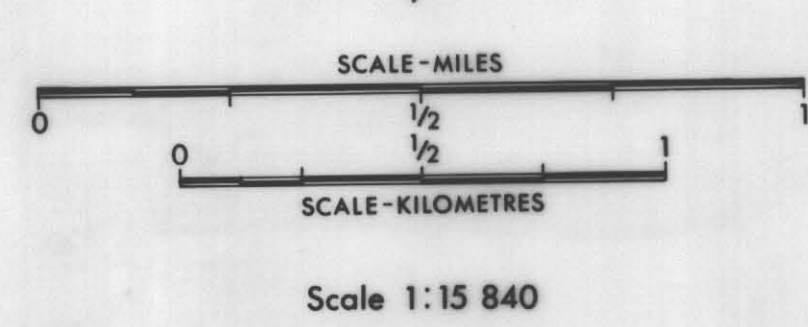
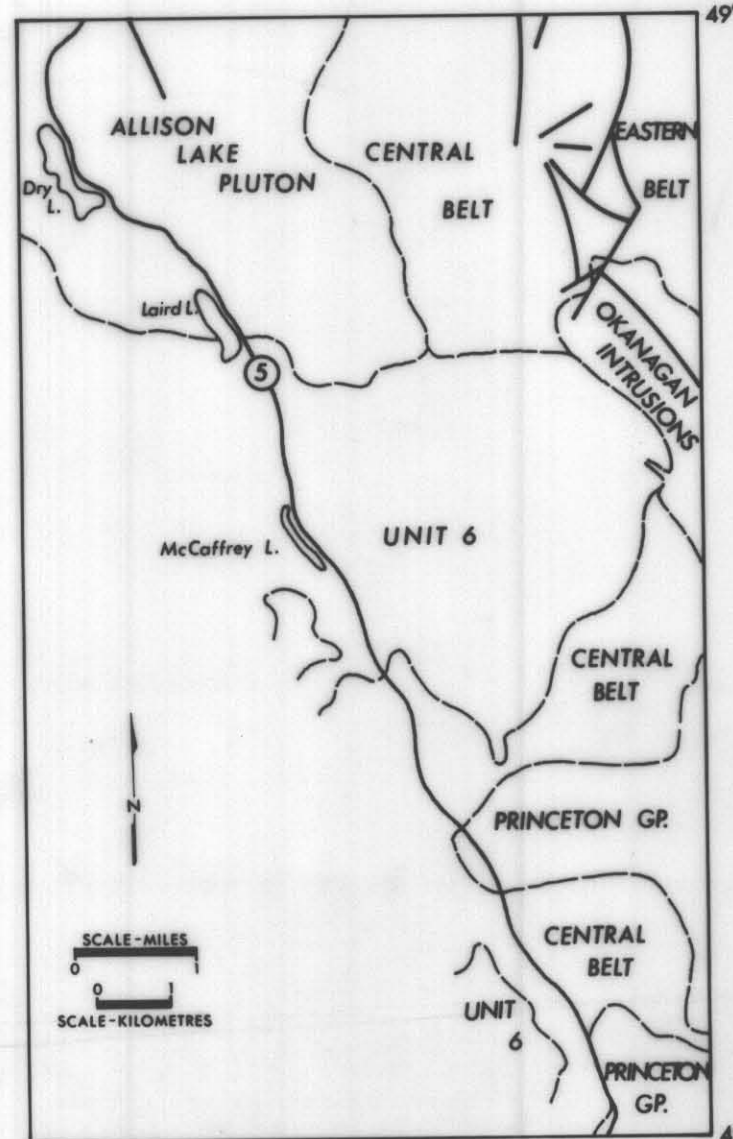
BRITISH COLUMBIA
DEPARTMENT OF MINES AND PETROLEUM RESOURCES
PRELIMINARY MAP NO. 21
AUGUST, 1976
GEOLOGY OF THE NICOLA GROUP
SOUTH OF ALLISON LAKE
BRITISH COLUMBIA
By V.A. PRETO

LEGEND

- MIDDLE EOCENE**
- 10 FRINCETON GROUP
- 10a - BOULDER CONGLOMERATE, GRIT, SANDSTONE, AND SILTSTONE
 - 10b - REDDISH BASALTIC AND/OR ANDESITIC FLOWS AND FLOW BRECCIA; LAHARIC BRECCIA
- PRE-TERTIARY**
- 9 VOLCANIC CONGLOMERATE AND LIMESTONE
- 9a - RED VOLCANIC BOULDER CONGLOMERATE
 - 9b - GREY, LOCALLY BEDDED, IMPURE LIMESTONE AND CALCAREOUS GRIT
- UPPER CRETACEOUS (CENOMANIAN)**
- 8 OKANAGAN INTRUSIONS
- 8a - GREY BIOTITE-HORNBLende GRANODIORITE, PINKISH GREY BIOTITE QUARTZ MONZONITE, AND MINOR PINK GRANITE
 - 8b - HORNBLende DIORITE, QUARTZ DIORITE, AND GRANDIORITE
- PRE-UPPER CRETACEOUS AND POST-UPPER TRIASSIC**
- 7 GRANITIC PLUTONS ALONG ALLISON CREEK
- 7a - PINK BIOTITE-HORNBLende LEUCOGRANITE WITH POORLY DEVELOPED GRAPHIC AND MIAROLITIC TEXTURE
 - 7b - PINKISH GREY AND GREY, PORPHYRITIC, MEDIUM-GRAINED SYENODIORITE AND MONZONITE
 - 7c - MEDIUM-GRAINED PINKISH GREY TO GREEN-GREY GRANODIORITE AND QUARTZ DIORITE
 - 7d - DARK GREEN, MAFIC MICRODIORITE
 - 7e - PINK MICROGRANITE AND MICROSyenITE PORPHYRY COMMONLY OCCURRING AS DYKES
 - 7f - INTENSELY SILICIFIED AND ALTERED METAVOLCANIC ROCKS
- 6 SUBAERIAL FLOWS, ASH FLOWS, LITHIC TUFF, AND LAHARIC DEPOSITS
- 6a - BASAL BOULDER CONGLOMERATE RICH IN CLASTS OF UNITS 5 and 1
 - 6b - GREY TO MAROON, FLOW-BANDED DACITIC AND RHYOLITIC FLOWS AND ASH FLOWS
 - 6c - GREY TO MAROON, PLAGIOCLASE-RICH ANDESITIC TO DACITIC FLOWS AND FLOW BRECCIA; MINOR LITHIC AND/OR CRYSTAL TUFF
 - 6d - GREY TO REDDISH GREY AND BROWN LAHARIC DEPOSITS, TUFF, AND TUFF BRECCIA ENTIRELY OR LARGELY COMPOSED OF CLASTS OF UNITS 5a, 6b, and 5; MINOR CONGLOMERATE, LOCALLY WITH EXTREMELY LARGE BOULDERS (UP TO 8 METRES IN DIAMETER)
- UPPER TRIASSIC**
- 5 ALLISON LAKE PLUTON
- 5a - REDDISH TO REDDISH GREY BIOTITE-HORNBLende GRANITE AND QUARTZ MONZONITE
 - 5b - GREY HORNBLende GRANODIORITE
 - 5c - GREY TO DARK GREY HORNBLende DIORITE, GABBRO, AND QUARTZ DIORITE
 - 5d - METAVOLCANIC ROCKS WITHIN OR NEAR THE PLUTON
- 4 GREY, MEDIUM TO COARSE-GRAINED PYROXENE DIORITE, QUARTZ DIORITE, DIORITE BRECCIA, MONZONITE, AND MONZONITE PORPHYRY DYKES
- 4a - DIORITE, QUARTZ DIORITE, MONZONITE, AND DIORITE BRECCIA
 - 4b - MONZONITE PORPHYRY DYKES
- 3 SHEARED AND MYLONITIZED, LEUCOCRATIC QUARTZ PORPHYRY NICOLA GROUP EASTERN BELT
- 2 BASALTIC FLOWS AND BRECCIA, SILTSTONE, GREYWACKE, AND LAHARIC DEPOSITS
- 2a - PURPLISH GREEN PYROXENE-PLAGIOCLASE FLOWS, FLOW BRECCIA, AND MINOR TUFF BRECCIA, LOCALLY INTENSELY RECRYSTALLIZED
 - 2b - GREY-GREEN, MASSIVE TO BEDDED VOLCANIC SILTSTONE AND GREYWACKE, LOCALLY TUFFACEOUS
 - 2c - MASSIVE TO CRUDELY BEDDED GREY-GREEN LAHARIC DEPOSITS
- CENTRAL BELT**
- 1 MASSIVE FLOWS, BRECCIA, TUFF, AND LIMESTONE
- 1a - MASSIVE, DARK GREEN BASALTIC AND ANDESITIC FLOWS WITH PLAGIOCLASE AND/OR CLINOPYROXENE PHENOCRYSTS, LOCALLY CUT BY GREEN PLAGIOCLASE PORPHYRY DYKES
 - 1b - AUTOBRECCIATED EQUIVALENTS OF 1a
 - 1c - MASSIVE TO THINLY BEDDED GREEN CRYSTAL AND LITHIC TUFF LOCALLY RICH IN FELSIC FRAGMENTS; MINOR VOLCANIC SANDSTONE AND SILTSTONE
 - 1d - DARK GREEN, MASSIVE TO GRADED BEDDED VOLCANIC SILTSTONE, SANDSTONE, AND PEBBLE CONGLOMERATE
 - 1e - BEDDED TO MASSIVE, GREY, FOSSILIFEROUS, IMPURE LIMESTONE AND LIMESTONE BRECCIA WITH INTERBEDDED THIN BASALTIC FLOWS
 - 1f - LOCALLY CALCAREOUS SANDSTONE, GRITSTONE, AND PEBBLE CONGLOMERATE RICH IN FELSIC CLASTS; MINOR INTERBEDDED BASALTIC FLOWS

SYMBOLS

- AREA OF PREDOMINANT OUTCROP
- FAULT
- AREA OF INTENSE SHEARING
- JOINT, FRACTURE SET: VERTICAL, INCLINED
- PRIMARY FOLIATION: VERTICAL, INCLINED
- BEDDING: VERTICAL, INCLINED, RIGHT SIDE UP
- PROSPECT: TRENCH, ADIT
- POWER TRANSMISSION LINE
- GEOLOGICAL CONTACT: DEFINED, ASSUMED
- NATURAL GAS PIPELINE
- SAMPLE LOCATION, MINERAL USED, AND APPARENT AGE IN M.Y. (MS - MUSCOVITE, BI - BIOTITE, HB - HORNBLende)



cp = CHALCOPYRITE
cc = CHALCOCLITE
bn = BORNITE
mal = MALACHITE

az = AZURITE
py = PYRITE
mt = MAGNETITE
hem = HEMATITE