



BRITISH COLUMBIA
DEPARTMENT OF MINES AND PETROLEUM RESOURCES

PRELIMINARY MAP NO. 17
JULY, 1975

GEOLOGY OF THE
ALLISON LAKE - MISSEZULA LAKE AREA
BRITISH COLUMBIA

GEOLOGY BY: V. A. PRETO, S. J. ATKINSON, AND J. NEBOCAT, 1974

0 1/2 1
MILES

0 1/2 1
KILOMETRES

- LEGEND**
- PLEISTOCENE AND RECENT**
- 9 RED AND GREY, VESICULAR OLIVINE VALLEY BASALT
- LOWER CRETACEOUS**
- KINGSVALE GROUP**
- 8 PLAGIOCLASE AND AUGITE-PLAGIOCLASE ANDESITE PORPHYRY
- LOWER TO MIDDLE JURASSIC**
- 7 ALLISON LAKE PLUTON
 - 7a - REDDISH GREY TO RED, LOCALLY MIAROLITIC BIOTITE-HORNBLende GRANITE AND QUARTZ MONZONITE
 - 7b - GREY HORNBLende GRANODIORITE
 - 7c - GREY TO DARK GREY, LOCALLY MIGMATITIC HORNBLende DIORITE AND QUARTZ DIORITE
 - 7d - HORNBLende, MIGMATIZED, AND SILICIFIED VOLCANIC ROCKS WITHIN OR NEAR THE PLUTON
- UPPER TRIASSIC**
- 6 DIORITE AND MONZONITE
 - 6a - GREY, MEDIUM-GRAINED PYROXENE DIORITE AND MONZONITE
 - 6b - GREEN HORNBLende PORPHYRY
 - 5 PINK AND GREY, MEDIUM-GRAINED PORPHYRY MONZONITE AND SYENITE
 - 5a - MONZONITE VEIN BRECCIA
 - 4 LEUCOCRATIC, PYRITIC QUARTZ PORPHYRY, LOCALLY HIGHLY SHEARED AND MYLONITIZED
- NICOLA GROUP**
- EASTERN BELT**
- 3 LAHAR DEPOSITS AND ASSOCIATED VOLCANIC CONGLOMERATE, SANDSTONE, SILTSTONE, AND TUFF; MINOR INTERLAYERED FLOW ROCKS
 - 3a - THINLY LAMINATED, GREY-WEATHERING VOLCANIC SANDSTONE, SILTSTONE, AND SHALE, TYPICALLY GRADED AND/OR CROSSBEDDED
 - 3b - MASSIVE TO CRUDELY LAYERED LAHAR DEPOSITS WITH ABUNDANT CLASTS OF PINK SYENITE AND PURPLE TRACHYTE; DISCONTINUOUS LENSES OF VOLCANIC CONGLOMERATE AND GRIT, AND OCCASIONAL LENSES OF REDDISH, IMPURE LIMESTONE
 - 3c - REDDISH TO GREENISH GREY CRYSTALLINE LITHIC, AND LAPILLI TUFF AND VOLCANIC SANDSTONE, LOCALLY WITH LENSES OF IMPURE LIMESTONE
 - 3d - PURPLE AND GREY LOCALLY ANGLITE-BEARING AUGITE-PLAGIOCLASE TRACHYANDESITE AND TRACHYBASALT PORPHYRY, LOCALLY WITH BLOCKS OF FOSSILIFEROUS LIMESTONE
- CENTRAL BELT**
- 2 ANDESITIC FLOWS, VOLCANIC BRECCIA AND LAHAR DEPOSITS, VOLCANIC SILTSTONE
 - 2a - MASSIVE GREENISH GREY TO GREY AUGITE-PLAGIOCLASE ANDESITE PORPHYRY, EXTENSIVELY AUTOBRECCIATED
 - 2b - MASSIVE, GREEN VOLCANIC BRECCIA AND LAHAR DEPOSITS
 - 2c - MASSIVE, RED VOLCANIC BRECCIA AND LAHAR DEPOSITS
 - 2d - DARK GREY, THINLY LAMINATED, PYRITIC TUFF
 - 1 MASSIVE FLOWS, BRECCIA, AND LITHIC TUFF
 - 1a - MASSIVE DARK GREEN SUBAQUEOUS BASALTIC TO ANDESITIC FLOWS WITH PLAGIOCLASE AND/OR PYROXENE PHENOCRYSTS
 - 1b - AUTOBRECCIATED EQUIVALENTS OF 1a AND FLOW BRECCIA FROM 1a FLOWS
 - 1c - GREEN, CALCAREOUS AQUAGENE BRECCIA AND POSSIBLY FLOW BRECCIA OF COMPOSITION SIMILAR TO 1a
 - 1d - MASSIVE TO BEDDED TUFF AND LITHIC TUFF, LOCALLY WITH CALCAREOUS LENSES; MINOR SILTSTONE, SANDSTONE, AND CONGLOMERATE
 - 1e - IMPURE LIMESTONE AND LIMESTONE BRECCIA
 - 1f - GREEN, MASSIVE TO CRUDELY BEDDED DACITIC LITHIC TUFF WITH LIGHT GREY RHYOLITIC FRAGMENTS

- | | |
|--------------------|------------------|
| py = PYRITE | az = AZURITE |
| mal = MALACHITE | pyr = PYRRHOTITE |
| cp = CHALCOPYRITE | arg = ARGENTITE |
| cc = CHALCOCITE | td = TETRABLENDE |
| ml = MAGNETITE | gn = GALENA |
| bn = BORNITE | ls = LIMESTONE |
| Cu = NATIVE COPPER | |

- SYMBOLS**
- AREA OF PREDOMINANT OUTCROP
 - FAULT
 - AREA OF INTENSE SHEARING
 - PREVALENT FRACTURE DIRECTION: INCLINED, VERTICAL
 - SECONDARY FOLIATION: INCLINED, VERTICAL
 - BEDDING: VERTICAL, INCLINED, RIGHT SIDE UP
 - PROSPECT: TRENCH, PIT
 - GEOLOGICAL CONTACT: DEFINED, ASSUMED
 - POWER TRANSMISSION LINE
 - NATURAL GAS PIPELINE
 - FOSSIL LOCALITY
 - MICROSYENITE PORPHYRY CLASTS IN FRAGMENTAL VOLCANIC ROCKS

