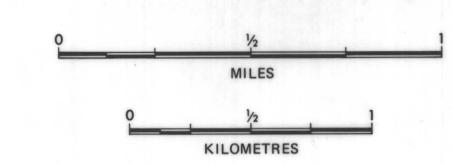


BRITISH COLUMBIA DEPARTMENT OF MINES AND PETROLEUM RESOURCES

> 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



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 - HORNFELSED, MIGMATIZED, AND SILICIFIED VOLCANIC ROCKS WITHIN OR NEAR THE PLUTON

UPPER TRIASSIC 6 DIORITE AND MONZONITE

6a - GREY, MEDIUM-GRAINED PYROXENE DIORITE AND MON-6b - GREEN HORNBLENDE PORPHYRY

5 PINK AND GREY, MEDIUM-GRAINED PORPHYRITIC MONZONITE AND SYENITE 5a - MONZONITE VEIN BRECCIA

4 LEUCOCRATIC, PYRITIC QUARTZ PORPHYRY, LOCALLY HIGHLY SHEARED AND MYLONITIZED

NICOLA GROUP EASTERN BELT

OR CROSSBEDDED

3 LAHAR DEPOSITS AND ASSOCIATED VOLCANIC CONGLOMERATE, SANDSTONE, SILTSTONE, AND TUFF; MINOR INTERLAYERED FLOW ROCKS

3a - THINLY LAMINATED, GREY-WEATHERING VOLCANIC SAND-STONE, SILTSTONE, AND SHALE, TYPICALLY GRADED AND/

3b - MASSIVE TO CRUDELY LAYERED LAHAR DEPOSITS WITH ABUNDANT CLASTS OF PINK SYENITE AND PURPLE TRAC-HYTE; DISCONTINUOUS LENSES OF VOLCANIC CONGLOM-ERATE AND GRIT, AND OCCASIONAL LENSES OF REDDISH, IMPURE LIMESTONE

3c - REDDISH TO GREENISH GREY CRYSTAL, LITHIC, AND LAPILLI TUFF AND VOLCANIC SANDSTONE, LOCALLY WITH LENSES OF IMPURE LIMESTONE 3d - PURPLE AND GREY LOCALLY ANALCITE-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

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 PILLOW 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 mal = MALACHITE

cp = CHALCOPYRITE cc = CHALCOCITE

Cu = NATIVE COPPER

mt = MAGNETITE bn = BORNITE

arg = ARGENTITE td = TETRAHEDRITE

az = AZURITE

po = PYRRHOTITE

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 x

VOLCANIC ROCKS S

GEOLOGICAL CONTACT: DEFINED, ASSUMED POWER TRANSMISSION LINE NATURAL GAS PIPELINE FOSSIL LOCALITY

MICROSYENITE PORPHYRY CLASTS IN FRAGMENTAL

SCALE-MILES

