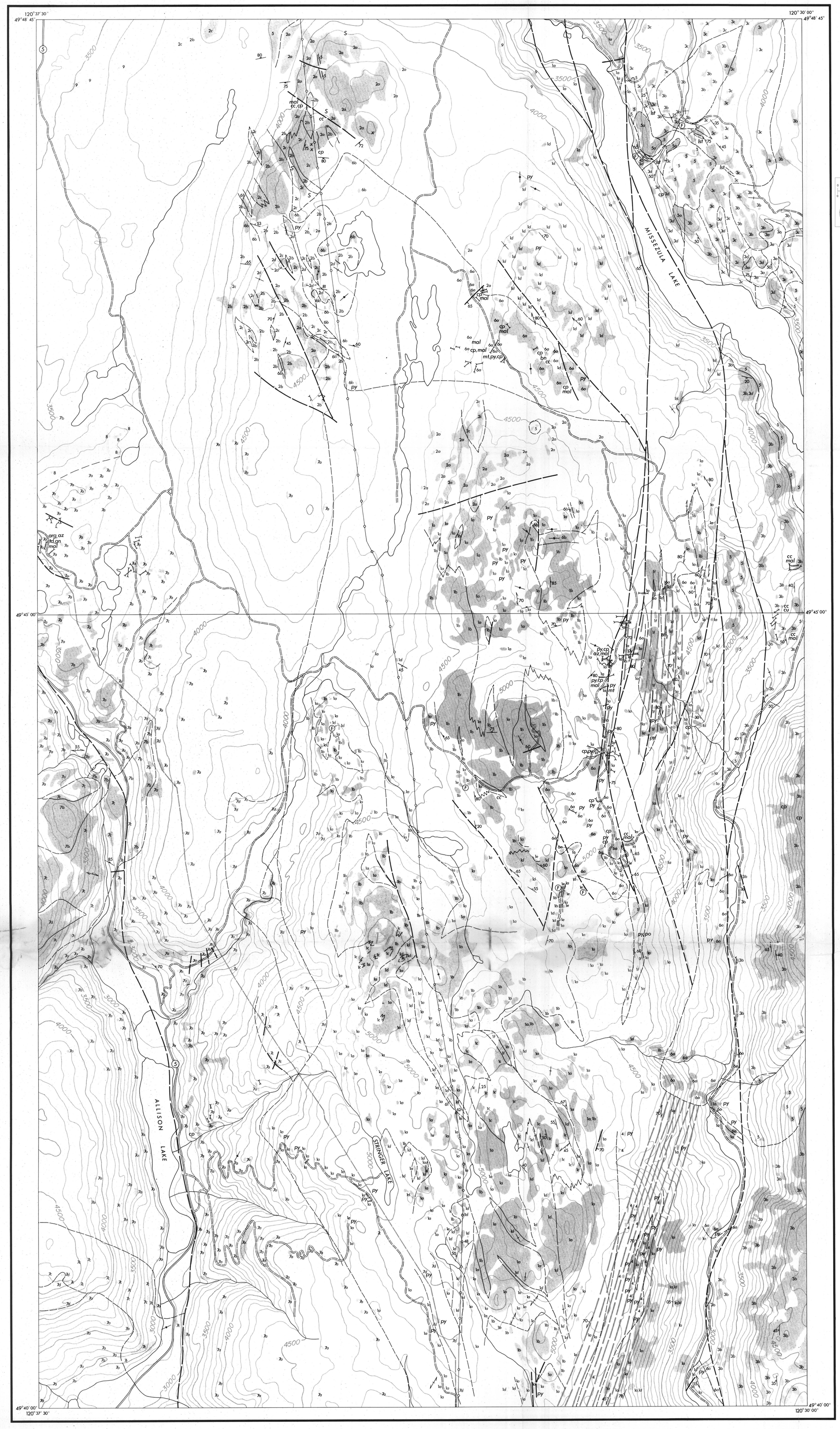

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BRITISH COLUMBIA
DEPARTMENT OF MINES AND PETROLEUM RESOURCES

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 ½ 1
MILES

0 ½ 1
KILOMETRES

inches
0 1 2
0 1 2 3 4 5
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

R. V. KIRKHAM
R. V. KIRKHAM
R. V. KIRKHAM

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 MONZONITE
- 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

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 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

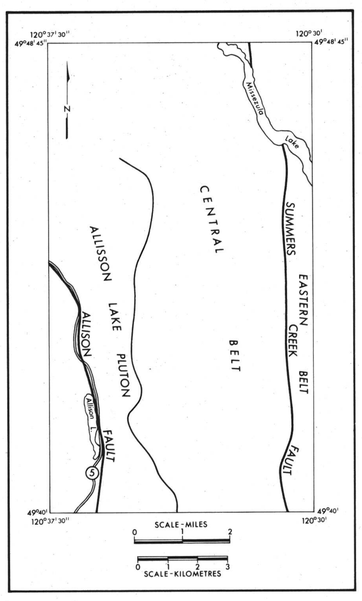
2 **ANDESITIC FLOWS, VOLCANIC BRECCIA AND LAHAR DEPOSITS, VOLCANIC SILTSTONE**
- 2a – MASSIVE GREENISH GREY TO GREY AUGITE–PLAGIOCLASE ANDESITE PORPHYRY, EXTENSIVELY AUTOBRECCIATED
- 2b – MASSIVE, GREEN VOLCANIC BRECCIA AND LAHAR DEPOSITS
- 2c – MASSIVE, RED VOLCANIC BRECCIA AND LAHAR DEPOSITS
- 2d – DARK GREY, THINLY LAMINATED, PYRITIC TUFF

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 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	*az*	= AZURITE
mal	= MALACHITE	*po*	= PYRRHOTITE
cp	= CHALCOPYRITE	*arg*	= ARGENTITE
cc	= CHALCOCITE	*td*	= TETRAHEDRITE
mt	= 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 (F)
- MICROSYENITE PORPHYRY CLASTS IN FRAGMENTAL VOLCANIC ROCKS S



THE GOVERNMENT DEPARTMENT OF
MINES AND PETROLEUM RESOURCES
PARLIAMENT BUILDINGS, VICTORIA, BRITISH COLUMBIA V8V 1X4