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BRITISH COLUMBIA
DEPARTMENT OF MINES AND PETROLEUM RESOURCES

PRELIMINARY MAP NO. 19
MAY, 1975

GEOLOGY OF GERMANSEN LAKE AREA

BY H. D. MEADE

LEGEND

TERTIARY

UNIT 12: RHYOLITE – WHITE TO LAVENDER, MEDIUM GRAINED, MASSIVE; WITH PERIPHERAL BEDDED AND FOLIATED TUFF

CRETACEOUS

UNIT 11: GERMANSEN BATHOLITH – FOLIATED PORPHYRITIC BIOTITE GRANODIORITE WITH MINOR PEGMATITE, SCHLIEREN, AND HOLOFELSIC MONZONITE AND QUARTZ MONZONITE DYKES

UPPER TRIASSIC – CRETACEOUS

UNIT 10: HOGEM BATHOLITH – HOLOFELSIC TO MESOCRATIC, RANGING IN COMPOSITION FROM GABBROS AND DIORITES TO SYENITE AND GRANITE

UPPER TRIASSIC – LOWER JURASSIC

TAKLA GROUP

UNIT 9: PORPHYRITIC ANDESITE – PLAGIOCLASE PHENOCRYSTS PRESENT IN ALL ROCKS: (a) GREY, MAROON, AND GREEN ANDESITE, TUFF BRECCIA, AND LAPILLI TUFF; (b) MAROON TO GREEN, PORPHYRITIC ANDESITE BRECCIA, VOLCANIC CONGLOMERATE, WACKE, AND MUDFLOW CONTAINING FRAGMENTS OF UNITS 7b, 8, AND 9a; (c) TRACHYTIC MAROON ANDESITE FLOW OR SUBVOLCANIC INTRUSION

UNIT 8: PORPHYRITIC BASALTIC ANDESITE – HORNBLENDE PHENOCRYSTS, DARK GREEN, MODERATELY MAGNETIC FLOWS AND VOLCANIC BRECCIA

UNIT 7: PORPHYRITIC BASALT – ALL UNITS HAVE AUGITE PHENOCRYSTS: (a) GREEN PORPHYRITIC BASALT AND FLOW BRECCIA WITH ABUNDANT MAGNETITE; (b) VARIABLY MAGNETIC, MAROON AND GREY BASALT, FLOW BRECCIA, TUFF BRECCIA, AND BEDDED LAPILLI AND ASH TUFFS; AMYGDALOIDAL, SPECULARITE BEARING, AND PLAGIOCLASE PHENOCRYST VARIETIES; (c) GREEN, PORPHYRITIC AND AMYGDALOIDAL AUGITE BASALT AND VOLCANIC BRECCIA WITH MINOR MAROON EQUIVALENTS

UNIT 6: SANDSTONE AND AMYGDALOIDAL BASALT – (a) OLIVE GREEN TO BROWN-WEATHERING, BLUE-GREY TO GREEN VOLCANIC SANDSTONE AND WACKE; (b) BLUE-GREY TO GREEN AMYGDALOIDAL BASALT, COARSE VOLCANIC BRECCIA AND LOCALLY VOLUMINOUS VOLCANIC CONGLOMERATE AND WACKE; (c) GREY TO BROWN-WEATHERING, GREY AND BLACK THIN-BEDDED SILTSTONE AND FRAGMENTAL BASALT OR ANDESITE; CONTAINS UBIQUITOUS PYRITE AND PYRRHOTITE

UNIT 5: FELSIC TUFF AND VOLCANIC SILTSTONE – DOLOMITIC, CARBONACEOUS, THIN-BEDDED ROCKS THAT WEATHER TO LIMONITE-STAINED OUTCROPS

UNIT 4: BASALT, BASALTIC ANDESITE, AND SANDSTONE AND WACKE – (a) BLUE-GREY TO GREEN, WEAKLY MAGNETIC AUGITE – PLAGIOCLASE BASALT, TUFF BRECCIA, AND VOLCANIC CONGLOMERATE; (b) BROWN-WEATHERING, BLUE-GREY TO GREEN, THIN-BEDDED TO MASSIVE, VOLCANIC SANDSTONE AND WACKE WITH DISSEMINATED PYRITE AND CARBONATE; (c) DARK GREY-GREEN TO BROWN, NONMAGNETIC, PORPHYRITIC HORNBLENDE – PLAGIOCLASE BASALTIC ANDESITE, TUFF BRECCIA, AND MINOR MUDFLOW BRECCIA

UNIT 3: BRECCIA AND SANDSTONE – BLACK SILICIFIED SILTSTONE FRAGMENTS IN A GREY MATRIX; BRECCIA IS INTERBEDDED WITH VOLCANIC SANDSTONE, SILTSTONE, AND ARGILLACEOUS CHERT

UNIT 2: BASALTIC ANDESITE – FOLIATED, GREY TO BROWN HORNBLENDE BASALTIC ANDESITE WITH INTERCALATED PYRITIC TUFF, AND GREEN AUGITE BASALT

UNIT 1: SEDIMENTARY AND VOLCANIC ROCKS – ARGILLITE, BLACK CHERT, LIMESTONE, FOLIATED TUFF AND SILTSTONE, SCHIST, PHYLLITE, AND FOLIATED HORNBLENDE ANDESITE; INTRUDED BY DYKES OF THE GERMANSEN BATHOLITH

SYMBOLS

GEOLOGICAL CONTACTS: OBSERVED, ASSUMED . . . .

FAULTS: OBSERVED, ASSUMED . . . .

OUTCROP LINES . . . .

AIRPHOTO LINEARS . . . .

METAL OCCURRENCES

py = PYRITE	Cu = NATIVE COPPER
po = PYRRHOTITE	mt = MAGNETITE
cp = CHALCOPYRITE	mal = MALACHITE
cc = CHALCOCITE	

BEDDING ATTITUDE . . . .

FOLIATION . . . .

GRANITIC DYKE . . . .

TRAP DYKE . . . .

DEPARTMENT OF MINES AND PETROLEUM RESOURCES,
GRAVEL ROAD . . . .

TYPE AREA OF UNIT 1 . . . . ☐

RIDGES . . . .

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