PRE. MAP # 39

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JULY 1980
PRELIMINARY MAP 39

GEOLOGY OF THE KELOWNA TERTIARY OUTLIER (WEST HALF)

BY B.N. CHURCH

LEGEND

CENOZOIC

VALLEY BASALT (0.762 Ma)

8 LAMBLY CREEK BASALT* LAVA AND BRECCIA

PLATEAU BASALT (11.8 Ma)

7 CARROT MOUNTAIN ALKALI BASALT* LAVA AND DYKES

WHITE LAKE FORMATION (OR EQUIVALENT EOCENE BEDS)

6 CONGLOMERATE, SANDSTONE, AND MINOR SHALE; CLASTS OF UNDERLYING VOLCANIC ROCKS AND PRE–TERTIARY UNITS INCLUDING GRANITE; FEW CARBONACEOUS SEAMS

MARAMA FORMATION

5 MOUNT BOUCHERIE DACITE DOME,* SIMILAR LAVA AND BRECCIA ON MOUNT LAW

MARRON FORMATION

4 **NIMPIT LAKE MEMBER** CONSISTING MOSTLY OF TRACHY–ANDESITE LAVA ACCOMPANIED BY MINOR ASH FLOW DEPOSITS ON MOUNT DROUGHT AND MOUNT LAW

3 **KITLEY LAKE MEMBER** (52.9 Ma) COMPRISING NUMEROUS TRACHYTE AND TRACHYANDESITE LAVA FLOWS COMMONLY WITH CONSPICUOUS GLOMEROPHENOCRYSTS OF PLAGIOCLASE AND SANIDINE

2 **CORYELL INTRUSION**: GRANITE TO SYENITE COMPOSITION FEEDER TO KITLEY LAKE FLOWS

1 ANDESITE OF UNCERTAIN CORRELATION WELL EXPOSED ON MOUNT SWITE, CONSISTING OF BROWN BRECCIAS AND LAVA FLOWS WITH QUARTZ–FILLED AMYGDALES; POSSIBLY COGENIC WITH THE SHATFORD CREEK ANDESITE* NEAR PENTICTON OR POSSIBLY THE 'ATTENBOROUGH CREEK ANDESITE'* IN THE TERRACE MOUNTAIN AREA

KETTLE RIVER FORMATION (INCLUDING ASSOCIATED RHYOLITE)

Oa TREPANIER RHYOLITE LAVA AND BRECCIAS WITH MINOR ARKOSIC SEDIMENTARY UNITS

SPRINGBROOK FORMATION

Ob CONGLOMERATE CHANNEL DEPOSITS COMMONLY WITH MANY PRE–TERTIARY CHERT AND GREENSTONE CLASTS

PRE–CENOZOIC BASEMENT ROCKS

Y MAINLY GRANITIC INTRUSIONS OF THE OKANAGAN BATHOLITH (LOWER CRETACEOUS–UPPER JURASSIC)

Z AN ASSORTMENT OF CHERTS, ARGILLACEOUS ROCKS, METAVOLCANIC AND SCHISTOSE UNITS

* INFORMAL NAMES AFTER GEOGRAPHIC LOCALITIES, UNITS NOT FULLY DEFINED

SYMBOLS

BEDDING
FORMATIONAL BOUNDARY
FAULT
GLACIAL STRIAE
BOUNDARY OF GLACIAL DRIFT
STRUCTURAL CROSS–SECTION
TOPOGRAPHICAL CONTOUR (INTERVAL, 500 FEET)
CHEMICAL ANALYSIS STATION
K/Ar SPECIMEN LOCALITY
ROAD
STREAM
LAKE

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

KILOMETRES 0 1 2 3 KILOMETRES
SCALE 1:50 000

SECTIONAL VIEW MT. MILLER TO WESTBANK, LOOKING NORTHERLY

SECTIONAL VIEW CARROT MTN. TO MT. BOUCHERIE, LOOKING EASTERLY AND NORTH