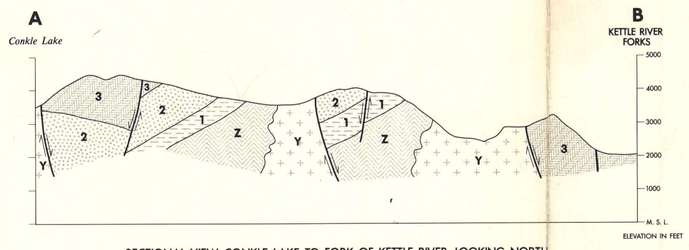
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

PRELIMINARY MAP 41

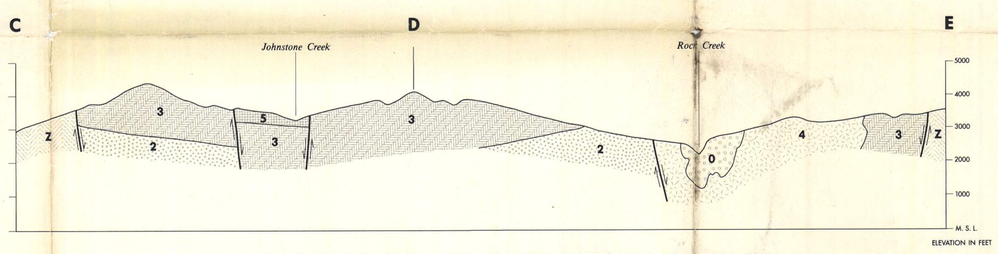
# GEOLOGY OF THE ROCK CREEK TERTIARY OUTLIER

BY B.N. CHURCH

NOVEMBER 1980




SECTIONAL VIEW CONKLE LAKE TO FORK OF KETTLE RIVER, LOOKING NORTH




SECTIONAL VIEW OF THE VALLEYS OF JOHNSTONE CREEK AND ROCK CREEK, LOOKING NORTH AND EAST

## LEGEND

### CENOZOIC

**MARRON FORMATION**

- **5** — **KITLEY LAKE MEMBER:** TRACHYANDESITE LAVA FLOWS AND EQUIVALENT DYKES CHARACTERIZED BY SCATTERED GLOMEROPHENOCRYSTS OF SUBHEDRAL PLAGIOCLASE
- **4** — **ROCK CREEK CHONOLITH (49.9 Ma):** A VARIETY OF 'CORYELL' SYENITE WITH ANORTHOCLASE FELDSPAR, BIOTITE, AUGITE, AND ACCESSORY NEPHELINE
- **3** — **YELLOW LAKE MEMBER:** PYROXENE–RICH MAFIC PHONOLITE LAVA, EQUIVALENT DYKES, SOME TUFF AND BRECCIA, AND INCLUDING LOCAL EXPOSURES OF 'RHOMB PORPHYRY' ANORTHOCLASE–RICH AND ANALCITE–BEARING LAVAS

**KETTLE RIVER FORMATION**

- **2** — **STORM HILL MEMBER*:** BROWN SANDSTONE PASSING LATERALLY TO [illegible] WITH CARBONACEOUS SEAMS, PARTLY INTERCALATED WITH BASAL UN[illegible] OF [illegible]RON FORMATION

*INFORMAL NAMES AFTER GEOGRAPHIC LOCALITIES, UNITS NOT FULL[illegible]D.

### CENOZOIC (*CONTINUED*)

**KETTLE RIVER FORMATION (*CONTINUED*)**

- **1** — **ED JAMES LAKE MEMBER*:** FANGLOMERATE BRECCIA AND ARKOSE WITH GRANITOID AND RHYOLITIC CLASTS

**SPRINGBROOK FORMATION**

- **0** — POLYMICTIC CONGLOMERATE CONSISTING OF PRE–TERTIARY CLASTS OF GREENSTONE, CHERT, GRANITOIDS, SCHIST, LIMESTONE, ETC.

### PRE–CENOZOIC BASEMENT ROCKS

- **Y** — MAINLY GRANITIC INTRUSIONS (UPPER JURASSIC–LOWER CRETACEOUS ?)
- **Z** — AN ASSORTMENT OF BASIC INTRUSIONS, SERPENTINITE AND PERIDOTITE (um) AND METAMORPHOSED BEDDED ROCK TYPES REFERRED TO LOCALLY AS THE ANARCHIST ASSEMBLAGE COMPRISING CONGLOMERATE (cg), CHERT (ch), GREENSTONE (gv), LIMESTONE (ls), AND MIXED SEDIMENTARY (s) AND VOLCANIC (v) ROCK TYPES

### SYMBOLS

- BEDDING
- FORMATIONAL BOUNDARY
- FAULT
- GLACIAL STRIAE
- STRUCTURAL CROSS–SECTION
- TOPOGRAPHICAL CONTOUR (INTERVAL, 500 FEET)
- CHEMICAL ANALYSIS STATION
- K/Ar SPECIMEN LOCALITY
- ROAD
- STREAM
- LAKE
- MINERALIZATION — Ni, Cr
- DYKE

inches 0 1 2
0 1 2 3 4 5 centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

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.

KILOMETRES 0 1 2 3 KILOMETRES
SCALE 1:50 000

• Heavy Mineral Sample Au (µg)

823554