

675304

104B/9W

CIM  
Bull  
mae  
91  
P&I

**GEOLOGICAL SOCIETY/SOCIÉTÉ DE LA  
GÉOLOGIE**

14:00, MEETING ROOMS 1-3, VANCOUVER TRADE  
AND CONVENTION CENTRE/SALLES DES RÉUN-  
IONS 1-3, CENTRE D'EXPOSITIONS ET DE CONGRÈS  
DE VANCOUVER

**Precious and Base Metal Deposits, Northwestern British  
Columbia**

JERRY BLACKWELL, Prime Equities Inc., Vancouver,  
British Columbia, Session Chairman

**Paper No. 15 — 14:00**

*Mesozoic and Tertiary Geological Setting for Mineral Deposition in the Iskut  
River Area.*

ROBERT G. ANDERSON, Cordilleran Division, Geological Survey of  
Canada, Vancouver, British Columbia, and  
MARY LOU BEVIER, Geochronology Section, Continental Geoscience  
Division, Geological Survey of Canada, Ottawa, Ontario

The Mesozoic and Tertiary geological history of the Iskut River map area (56-57°N,  
130-132°W; NTS 104 B) is rich and varied, comprising at least four episodes of mag-  
matism, evolution of three sedimentary basins, and three periods of deformation. This  
evolution of western Stikinia and eastern Coast Belt is the geological backdrop for Early  
Jurassic, Middle Jurassic, and Eocene base- and precious metal deposition.

Four Mesozoic and Tertiary magmatic episodes are defined by biochronology and  
U-Pb and K-Ar geochronometry of volcanic units and cospatial plutons. The geo-  
chronometry agrees closely with the biochronological constraints, based on the most  
recent revision of the Mesozoic time scale. Mesothermal or epithermal base- and pre-  
cious metal veins at Premier, Sulphurets, Kerr, Inel, Stonehouse and Snip are cospatial  
with TCPS alkaline intrusions; Eskay Creek deposit is related to Middle Jurassic basin  
formation. lead isotopic values for feldspar from dated Mesozoic and Tertiary plutons  
overlap the three distinct Pb isotopic signatures determined by other workers for vein  
galena in the various deposits of the Iskut-Stewart district.