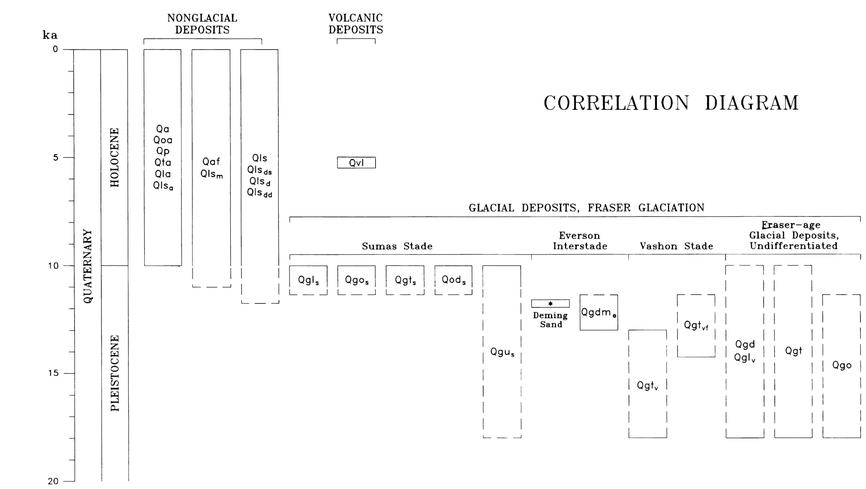
WASHINGTON STATE DEPARTMENT OF
Natural Resources
Jennifer M. Belcher - Commissioner of Public Lands

WASHINGTON DIVISION OF GEOLOGY AND EARTH RESOURCES
Raymond Lasmanis, State Geologist

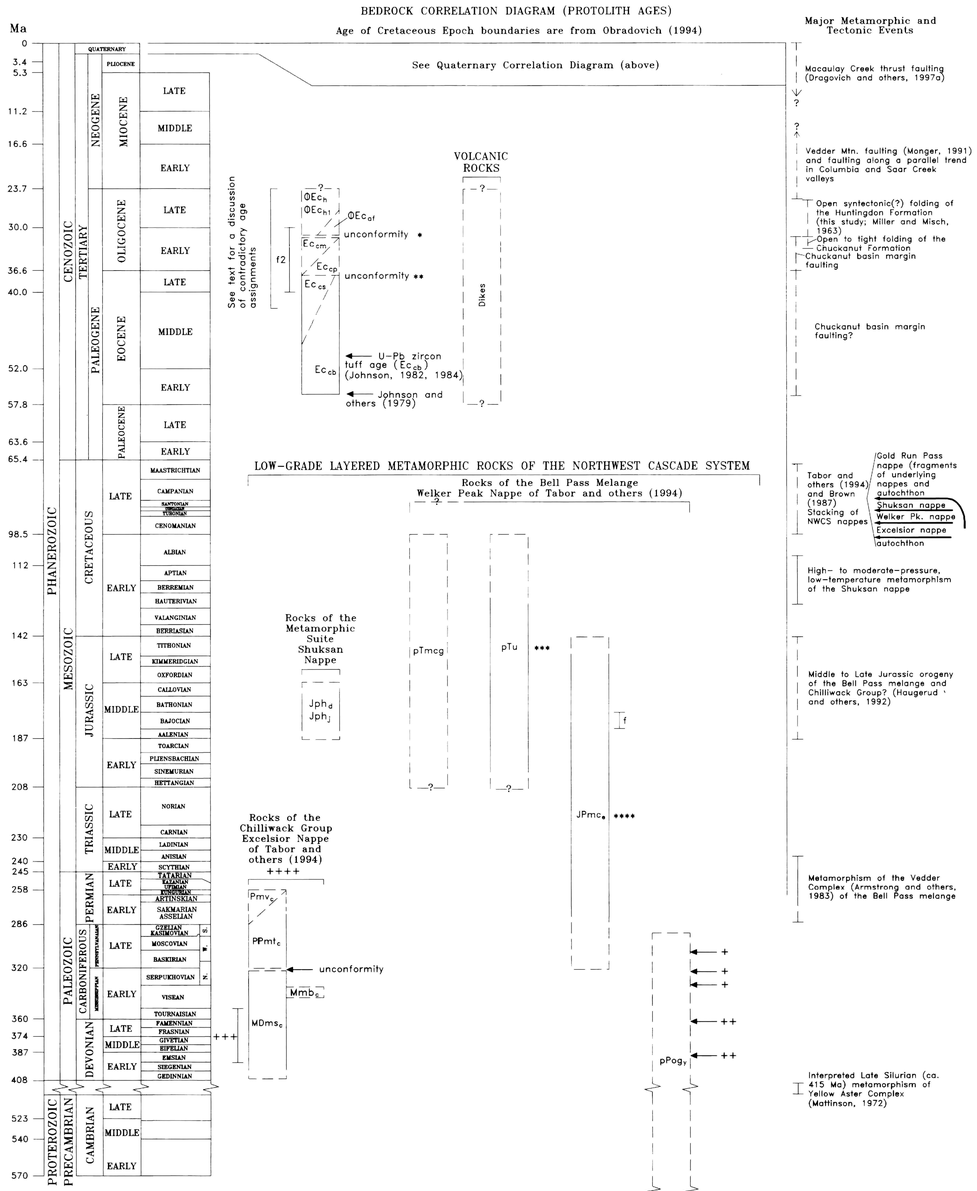
PLATE 3
OPEN FILE REPORT 97-2
GEOLOGIC MAP AND INTERPRETED GEOLOGIC HISTORY OF
THE KENDALL AND DEMING 7.5-MINUTE QUADRANGLES,
WESTERN WHATCOM COUNTY, WASHINGTON

# CORRELATION DIAGRAM

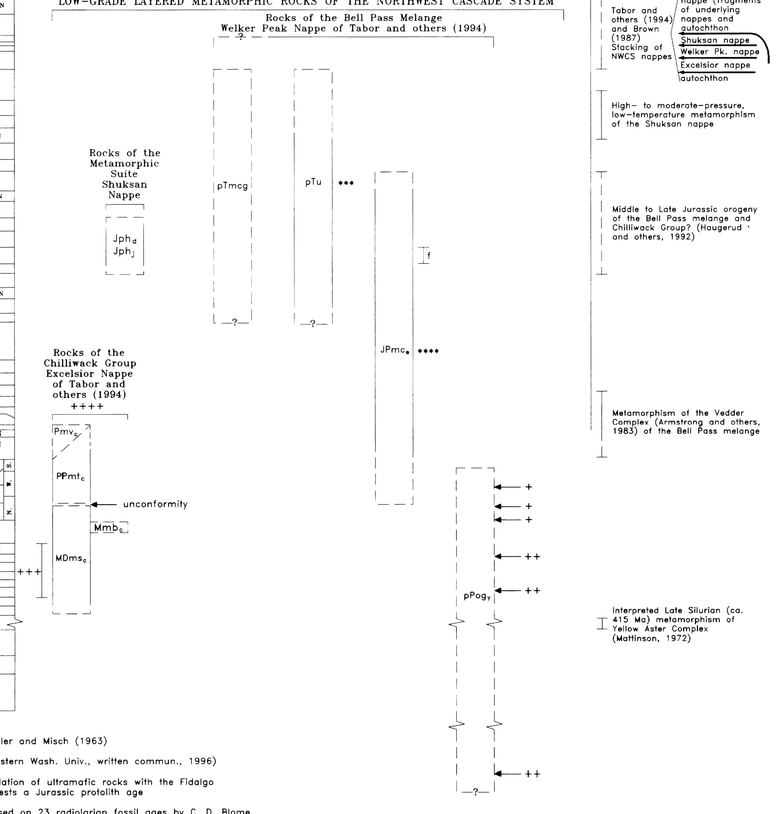



## BEDROCK CORRELATION DIAGRAM (PROTOLITH AGES)

Age of Cretaceous Epoch boundaries are from Obradovich (1994)




## LOW-GRADE LAYERED METAMORPHIC ROCKS OF THE NORTHWEST CASCADE SYSTEM




* This study; Miller and Misch (1963)

** G. Mustoe (Western Wash. Univ., written commun., 1996)

*** Tenuous correlation of ultramafic rocks with the Fidalgo Ophiolite suggests a Jurassic protolith age

**** Age range based on 23 radiolarian fossil ages by C. D. Blome, D. L. Jones, and B. Murchey, cited in Tabor and others (1994)

\+ Youngest U-Pb(Th) zircon ages of the Yellow Aster Complex (R. E. Zartman, written commun. to P. Misch, 1983, cited in Tabor and others, 1994); east of the study area

++ Unit lithologically and chronologically heterogeneous (for example, Tabor and others, 1994). U-Pb zircon geochronology suggests the oldest components of the Yellow Aster Complex are 1.6 billion yr old (T. Rasbury, oral commun., State Univ. of N.Y. at Stony Brook, 1997). Younger components have an interpreted age of about 360 Ma (T. Rasbury, oral commun., 1997)(See also Mattinson, 1972; Tabor and others, 1994)

+++ U-Pb detrital zircon age range for the Chilliwack Group 11 analyses,(2 samples)(McClelland and Mattinson, 1993; W. C. McClelland, cited in Tabor and others, 1994)

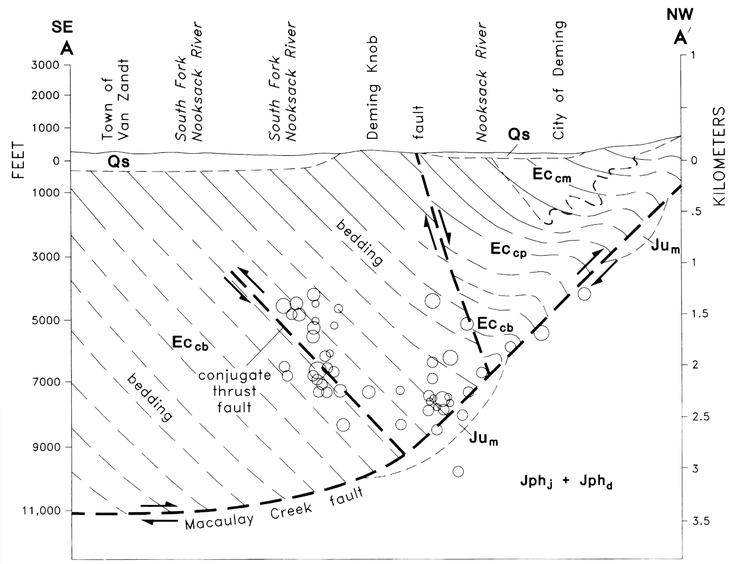
**** Unconformity and age ranges based on Liszak (1982), Monger (1966), Danner (1966), and other data cited in Tabor and others (1994)

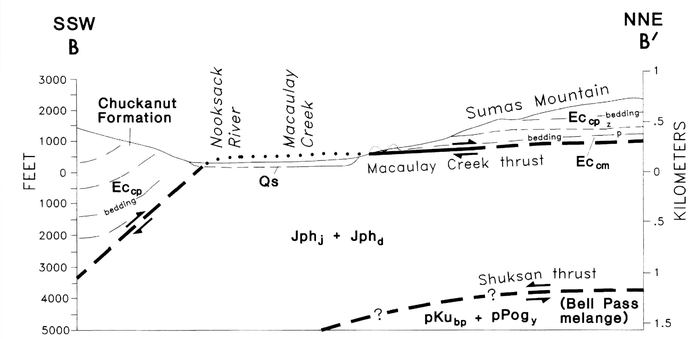
f Fossil age, this study, by C. D. Blome (USGS)

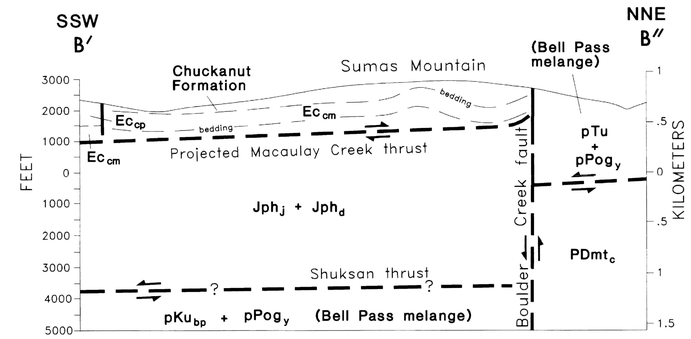
f2 Angiosperm and fungal spores suggest late Eocene-early Oligocene age; sample taken in southwest corner of the Kendall quadrangle; Mustoe and Rouse (1994)

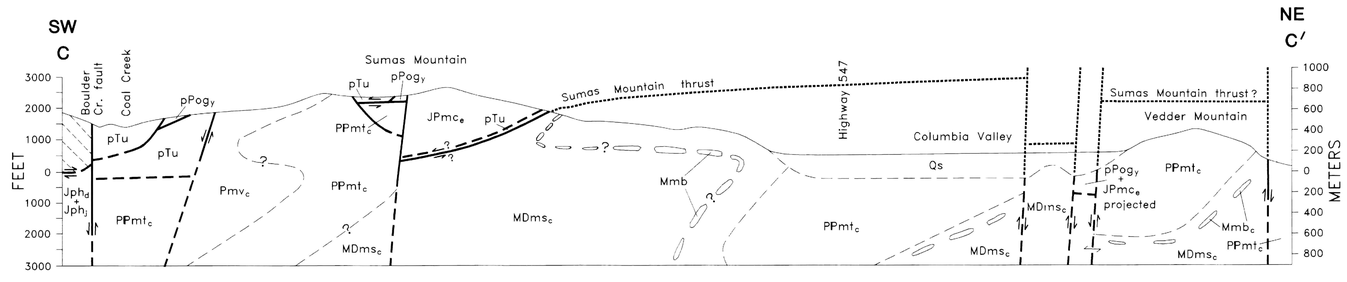
# CROSS SECTIONS

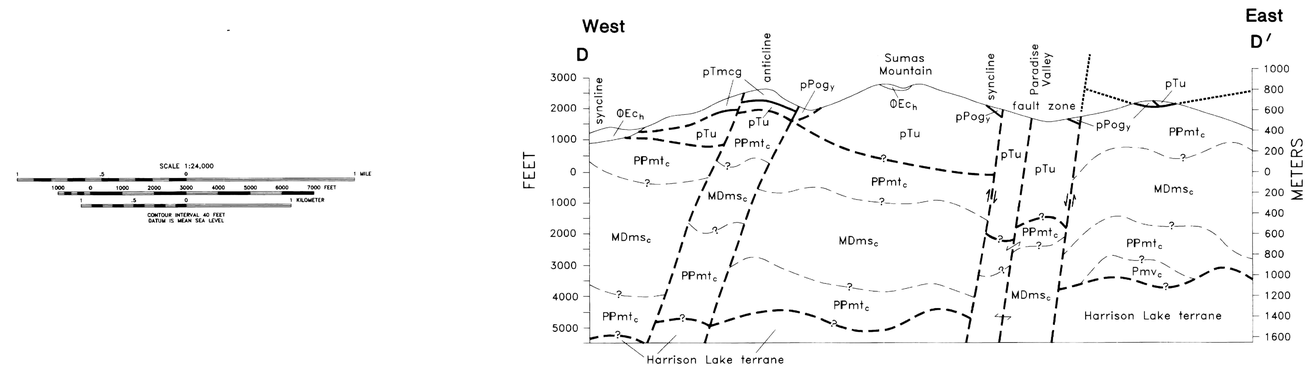
(no vertical exaggeration)

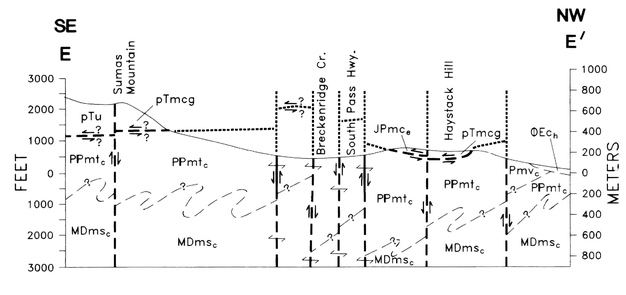
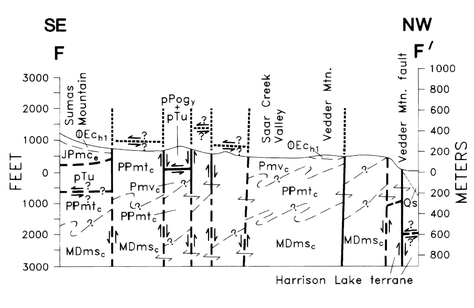



SCALE 1:24,000

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL