EXPLANATION OF MAP SYMBOLS

Geologic contact - Solid where exposed; dashed where approximately located; dotted where concealed; queried where uncertain.

Approximate location of the gradational contact between Lithosome A and B; gradation occurs over a distance of 1-1.5 km northwest of the contact and up to 4 km southeast of the contact.

Normal fault - Solid where exposed; dashed where approximately located; dotted where concealed; queried where uncertain. Ball and bar are on downthrown block. Number by arrow denotes the location and value of fault dip measurement.

Anticline - showing trace and plunge of inferred crest line; dashed where approximate.

Syncline - showing trace of inferred crest line; dashed where approximate.

Antiform overturned so it is now an approximate recumbent fold; arrows on ends of "horseshoe" denote the fold faces.

Monocline -- line is very approximately located in the middle of the steepest dips of the beds, dashed where approximately located; arrows denote dip direction.

Outcrop of Lithosome B gravel within unit Ttan2 located more thatn 0.3 km south-east of the Lithosome A - Lithosome B gradational contact.

Strike and dip of bedding.

Beds that dip less than 2 degrees.

Paleocurrent direction - Tail of vector is located at measurement location; method of measure-ment noted: channel trend (ch), basal channel scour grooves and longitudinal furrows (gr), cross-stratification (xs), and clast imbrication (i).

Uranium exploratory wells used to constrain subsurface stratigraphic relationships.; well label also shown.

Location of Castle and Wigzell #1 Kelly Federal well.

Cross-section line endpoint

ASHES

Ash Eta/Zeta
Ash Gamma
White Ash #4
Ash B Complex
Ash F
White Ash #3
White Ash #2
White Ash #1
Nambe White Ash
Middle Ash of Nambé Member
Lower Ash of Nambé Member
Non-correlated gray ashes in the Tesuque Formation
Lower intermediate volcaniclastic portion of unit Trnov

Note: ashes between various exposures may be correlated by dotted lines

FIGURE 1

FIGURE 2

FIGURE 3

A) South — North

Upper basalt flow of Trnov
Lower volcani-clastic inter-val of Trnov
Ttan1
undifferentiated Proterozoic basement
50 m
200 m

Castle and Wigzell #1 Kelly Federal Well
(only lowest interval shown -- 2270-2703 ft depth)

B) South

Ttan1 (lower Nambe Mbr of Tesuque Fm)
upper basalt flow(s) of Trnov (La Cieneguilla Basalt?)
lower volcaniclastic interval of Trnov (Bishops Lodge Mbr)
Ttan1

Coarse to very coarse grained, granite-bearing, pebbly arkosic sand
Mix of basaltic and granitic debrisis
Angular basalt chips
pebbly, granite-derived sand fine-grained, quartzose Pennsylvanian sandstone
dark limestone and siltstone correlative to Pennsylvanian and perhaps Mississippian strata

Pennsylvanian and Mississippian strata

TD 2703 ft
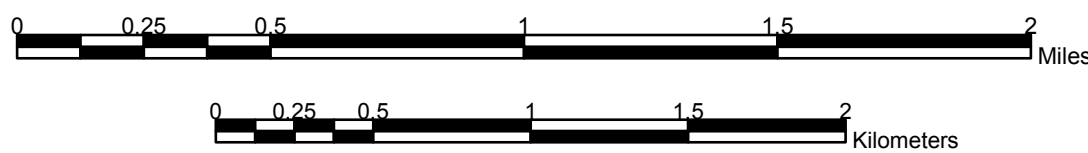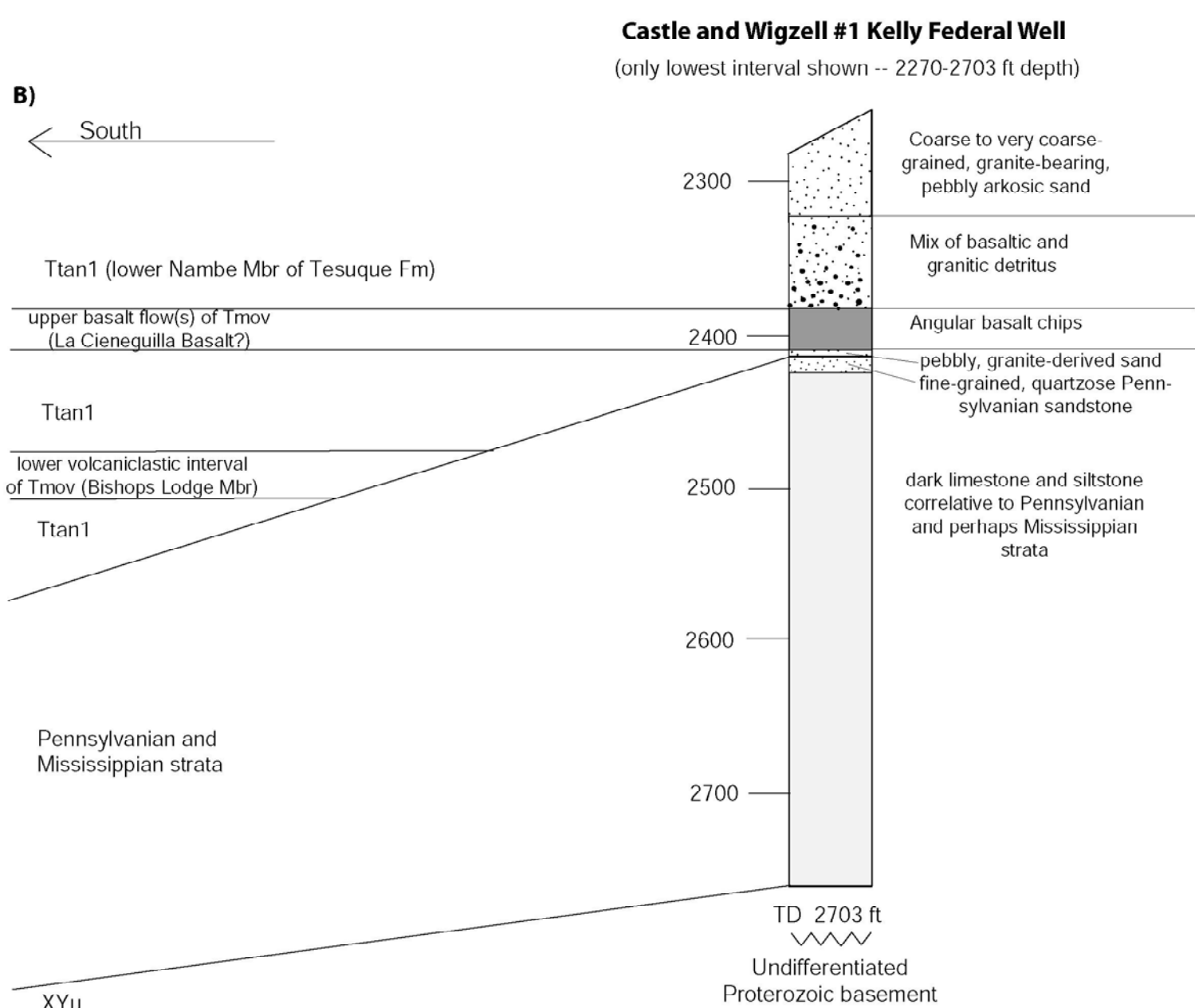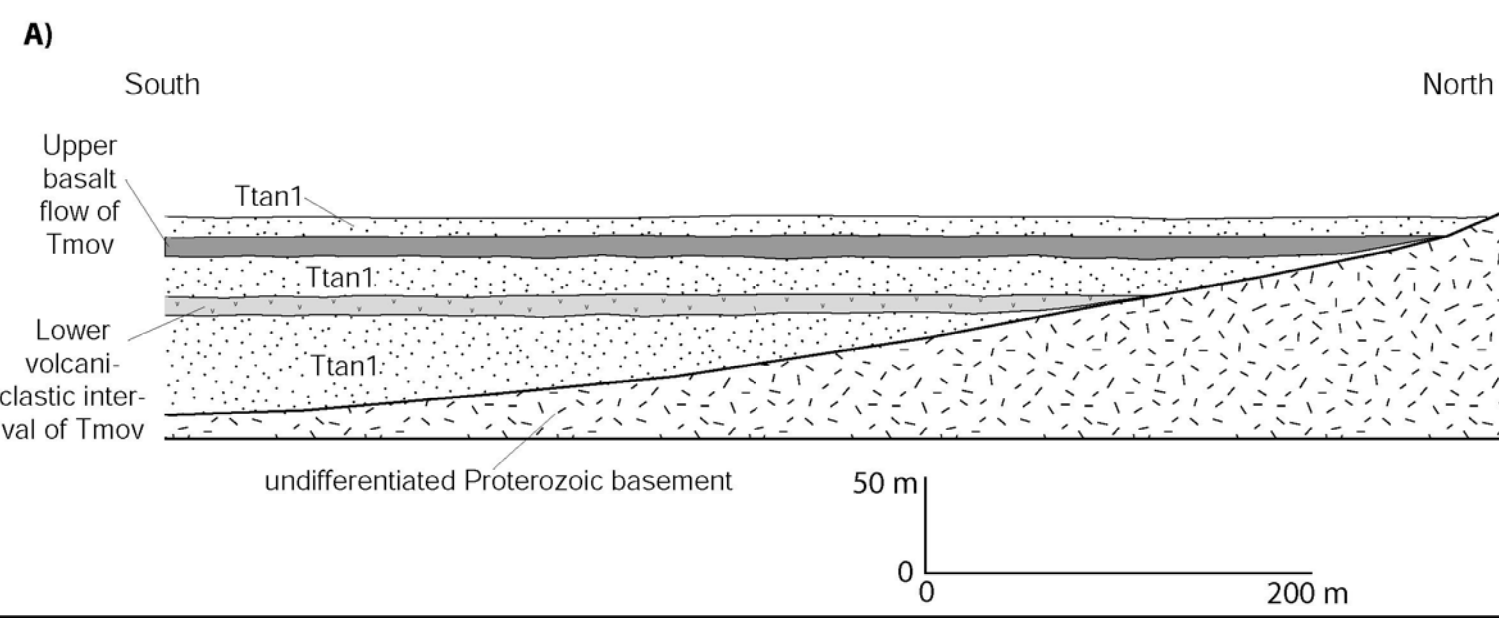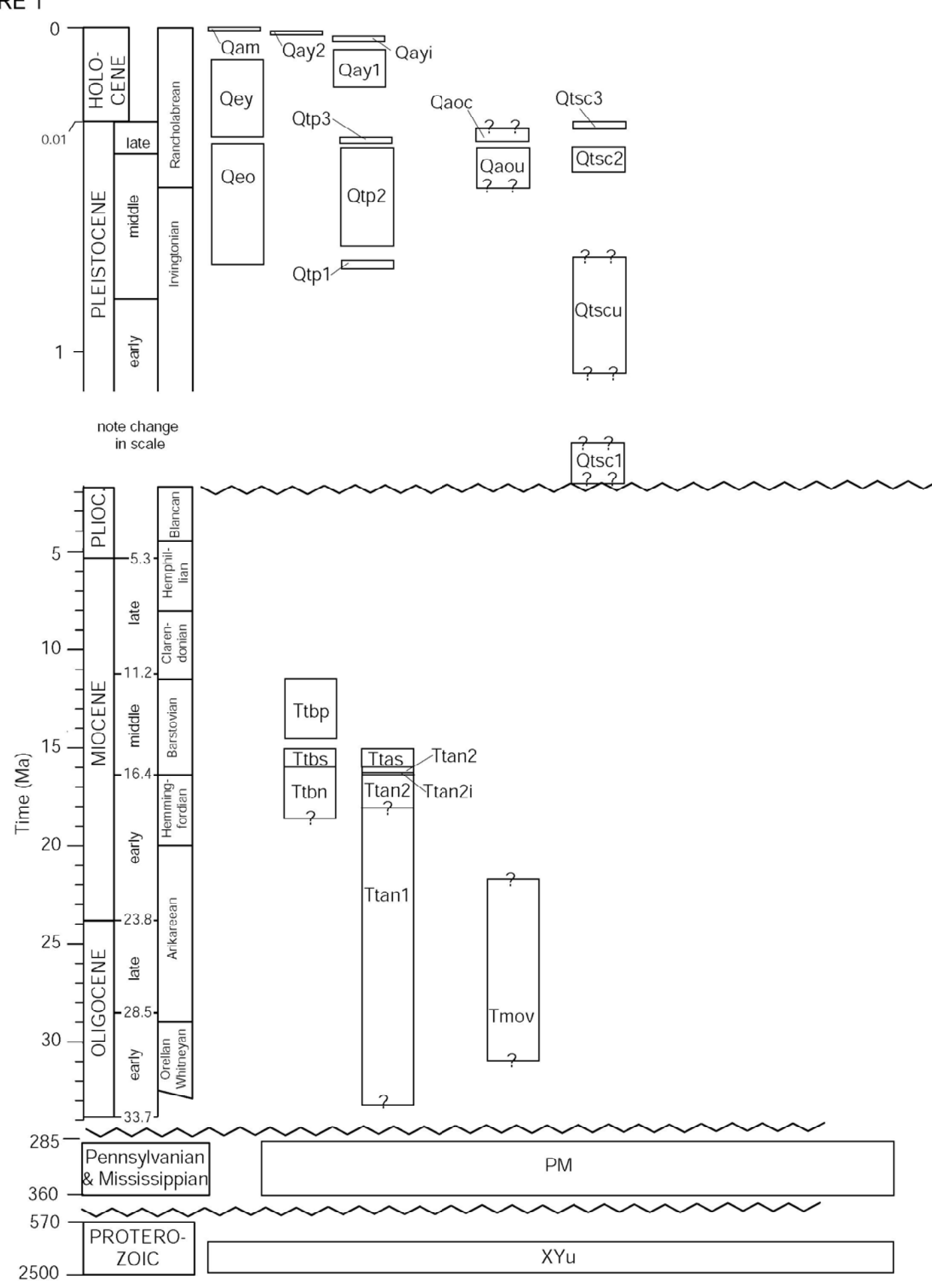Undifferentiated Proterozoic basement
XYu

Geologic Map of the Cundiyo 7.5 - minute quadrangle

by

Daniel Koning, Matt Nyman, Robert Horning, Martha Eppes, and Stephen Rogers

May 2002

1:24,000

Magnetic Declination
1977
12° East
At Map Center

N

NEW MEXICO STATEMAP

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

DRAFT
NMBGMR OF-GM 56

COMMENTS TO MAP USERS

A geologic map displays information on the distribution, nature, orientation, and age relationship of rock and deposits and the occurrence of structural features. Geologic and fault contacts are irregular surfaces that form boundaries between different types or ages of units. Data depicted on this geologic quadrangle map may be based on any of the following: reconnaissance field geologic mapping, compilation of published and unpublished work, and photogeologic interpretation. Locations of contacts are not surveyed, but are plotted by interpretation of the position of a given contact onto a topographic base map; therefore, the accuracy of contact locations depends on the scale of mapping and the interpretation of the geologist(s). Any enlargement of this map could cause misunderstanding in the detail of mapping and may result in erroneous interpretations. Site-specific conditions should be verified by detailed surface mapping or subsurface exploration. Topographic and cultural changes associated with recent development may not be shown.

Cross sections are constructed based upon the interpretations of the author made from geologic mapping, and available geophysical, and subsurface (drillhole) data. Cross-sections should be used as an aid to understanding the general geologic framework of the map area, and not be the sole source of information for use in locating or designing wells, buildings, roads, or other man-made structures.

The map has not been reviewed according to New Mexico Bureau of Geology and Mineral Resources standards. The contents of the report and map should not be considered final and complete until reviewed and published by the New Mexico Bureau of Geology and Mineral Resources. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the State of New Mexico, or the U.S. Government.

CROSS-SECTION B-B'
CUNDIYO QUADRANGLE, N.M.

scale of 1:24,000

by

DANIEL KONING

2002