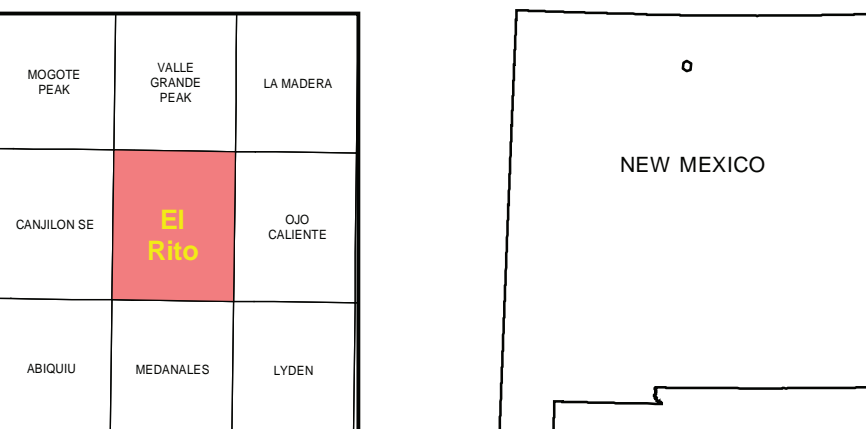


Base map from U.S. Geological Survey 1995, from photographs taken 1947. Revised from aerial photographs taken 1950. Noted checked (partial) in 1955. 1:24,000-scale aerial photograph, 1:24,000-scale map, and 1:24,000-scale map.

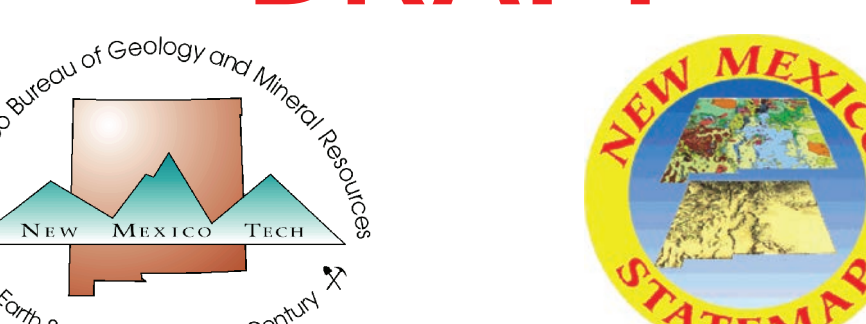


QUADRANGLE LOCATION

This draft geologic map is preliminary and will undergo revision. It was produced from either scans of hand-drafted originals or from digitally drafted original maps and figures using a wide variety of software, and is currently in cartographic production. It is being distributed in this draft form as part of the bureau's Open-File map series (OFGM), due to high demand for current geologic map data in these areas where STATEMAP quadrangles are located, and it is the bureau's policy to disseminate geologic data to the public as soon as possible.

After this map has undergone scientific peer review, editing, and final cartographic production (including a final map statement), it will be released as a cartographic production (GM) series. This final version will receive a new design and will supersede this preliminary open-file geologic map.

DRAFT



Geologic map of the El Rito quadrangle, Rio Arriba County, New Mexico.

May 2008
by Daniel J. Koning¹, Gary A. Smith², and Scott Aby³

¹New Mexico Bureau of Geology and Mineral Resources, 801 Leroy Pl., Socorro, NM, 87801
²Department of Earth and Planetary Sciences, University of New Mexico, Albuquerque, NM 87131
³Muddy Spring Geology, Box 488, Dixon, NM 87527

COMMENTS TO MAP USERS

A geologic map displays information on the distribution, nature, orientation, and age relationships 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map may be based on any of the following: reconnaissance field geologic mapping, compilation of published and unpublished work, and photographic interpretation.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 geologists. Any enlargement of this map could cause misinterpretation 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 interpretation of the author 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. This 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.

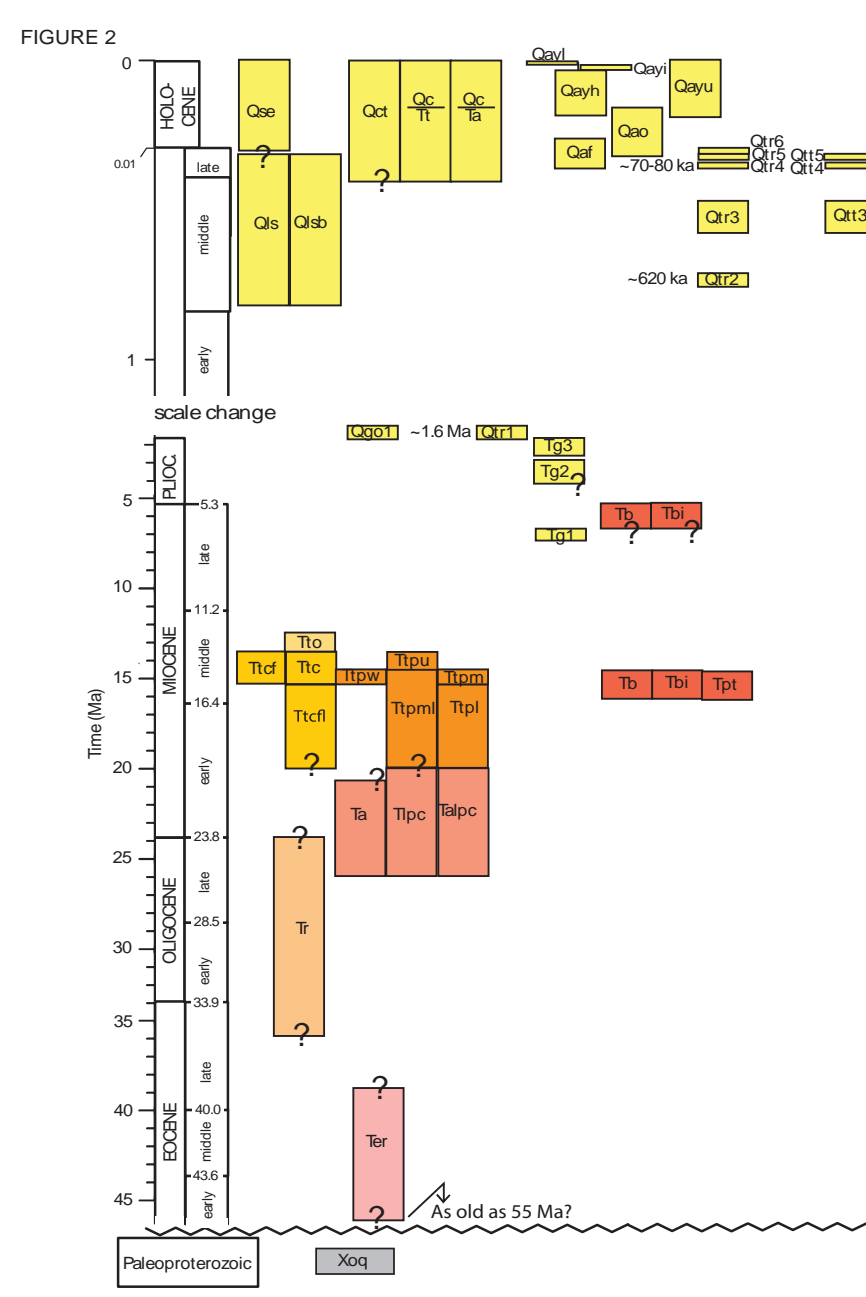
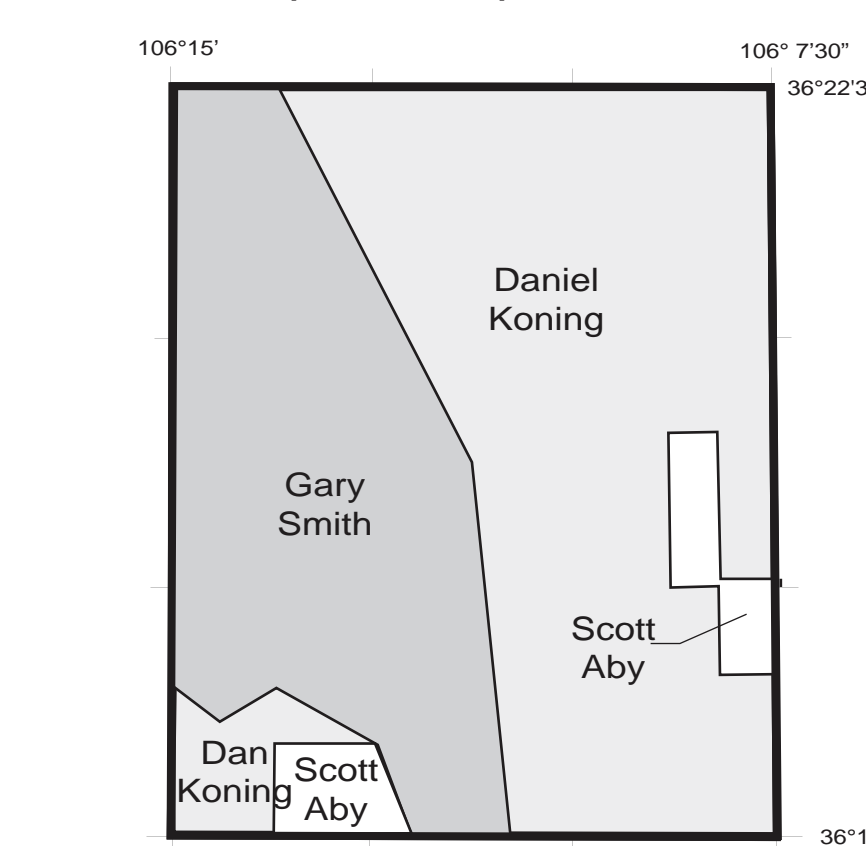


FIGURE 1 Map areas of respective authors



EL RITO 7.5-MINUTE QUADRANGLE, NM

EXPLANATION OF MAP SYMBOLS

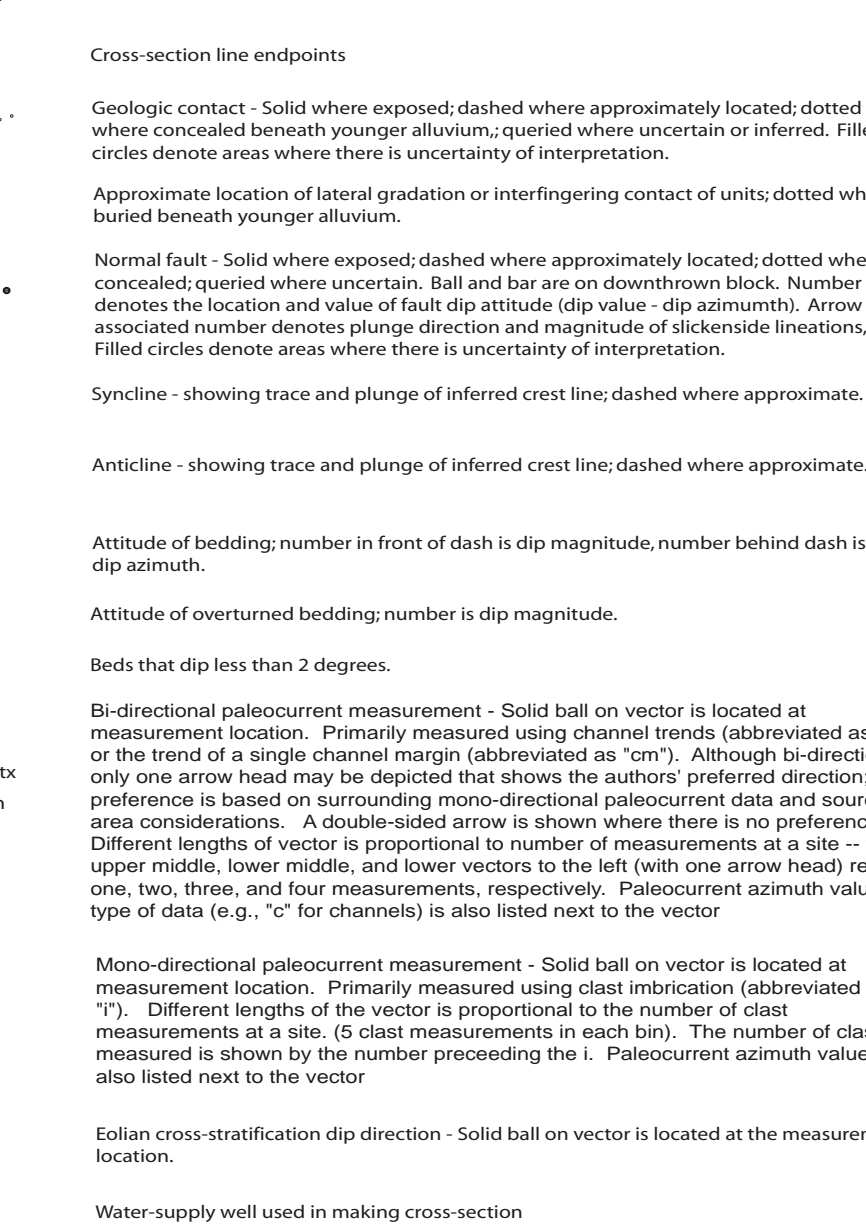


FIGURE 4

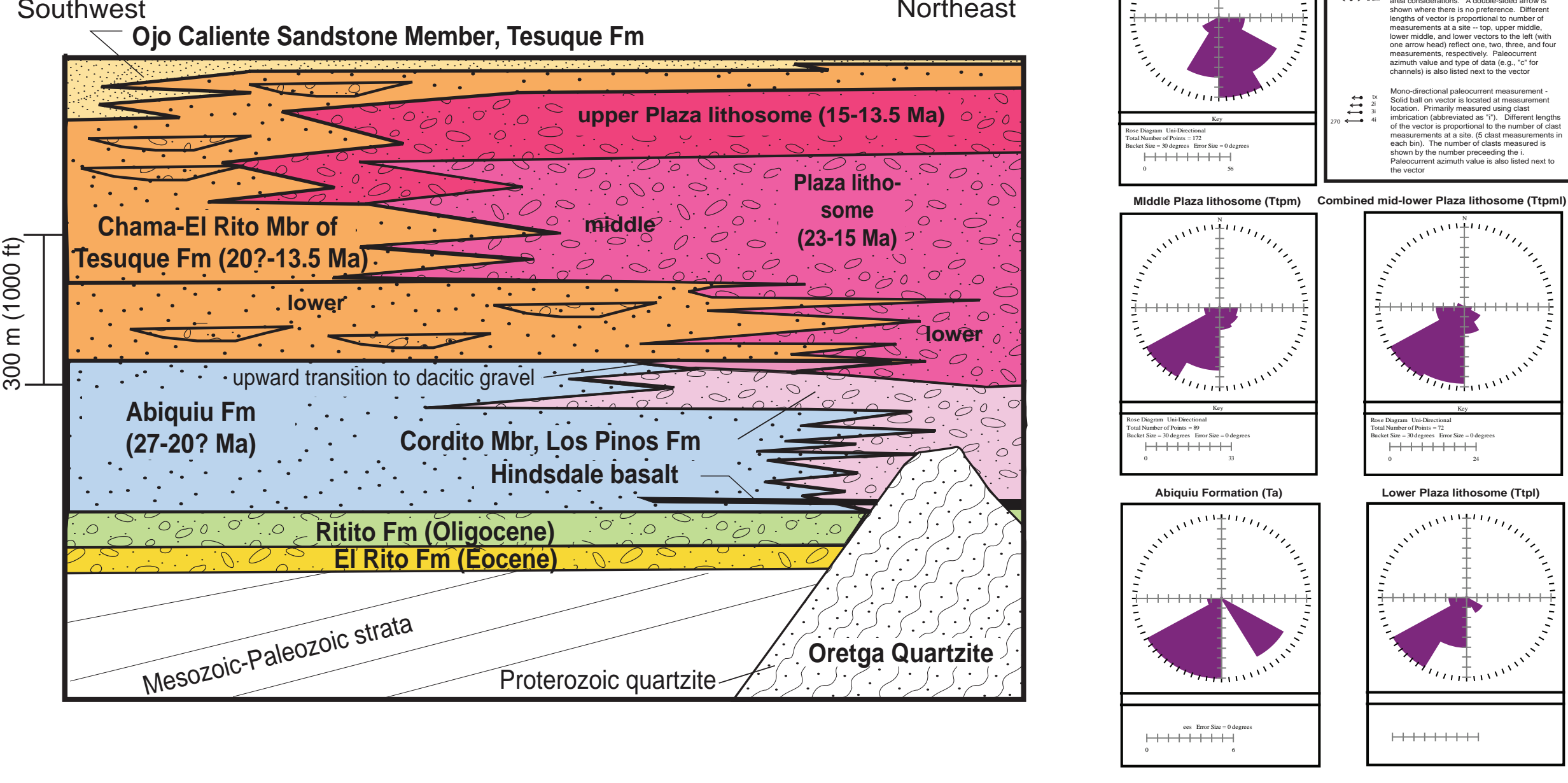


FIGURE 5

PALEOCURRENT DATA ON THE EL RITO 7.5-MINUTE QUADRANGLE

Data plotted in rose diagrams

Upper Plaza lithosome (T_{up})Middle Plaza lithosome (T_m)Combined mid-lower Plaza lithosome (T_{cm})Lower Plaza lithosome (T_l)Atlatzahuatl (T_a)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)Upper Pliocene (T_p)Lower Pliocene (T_p)