

Geologic map of the Ruidoso quadrangle, Lincoln and Otero Counties, New Mexico.

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by
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Open-File Map Series
OFGM 93

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<http://geoinfo.nmt.edu/publications/maps/geologic/ofgm/home.html>

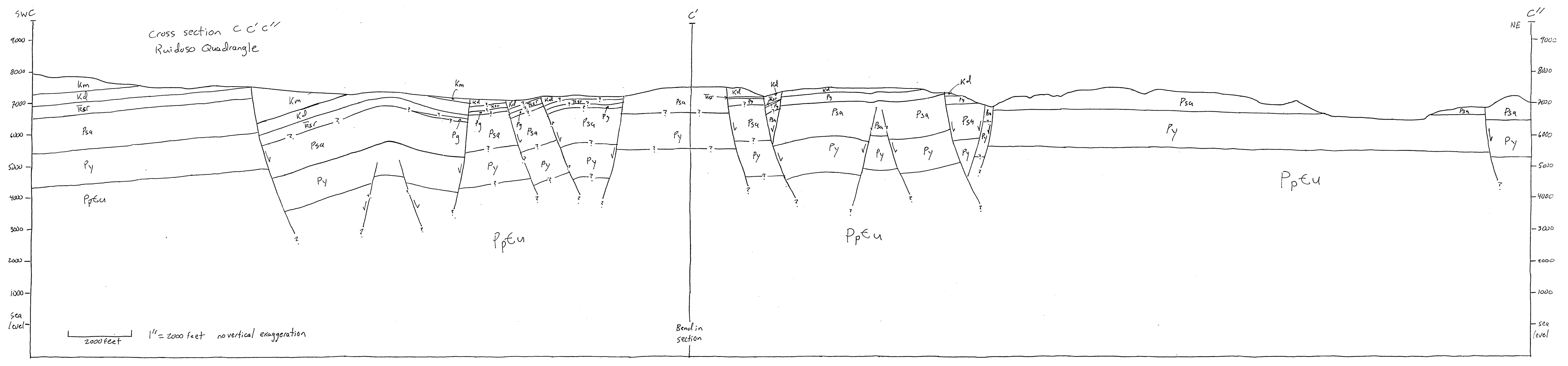
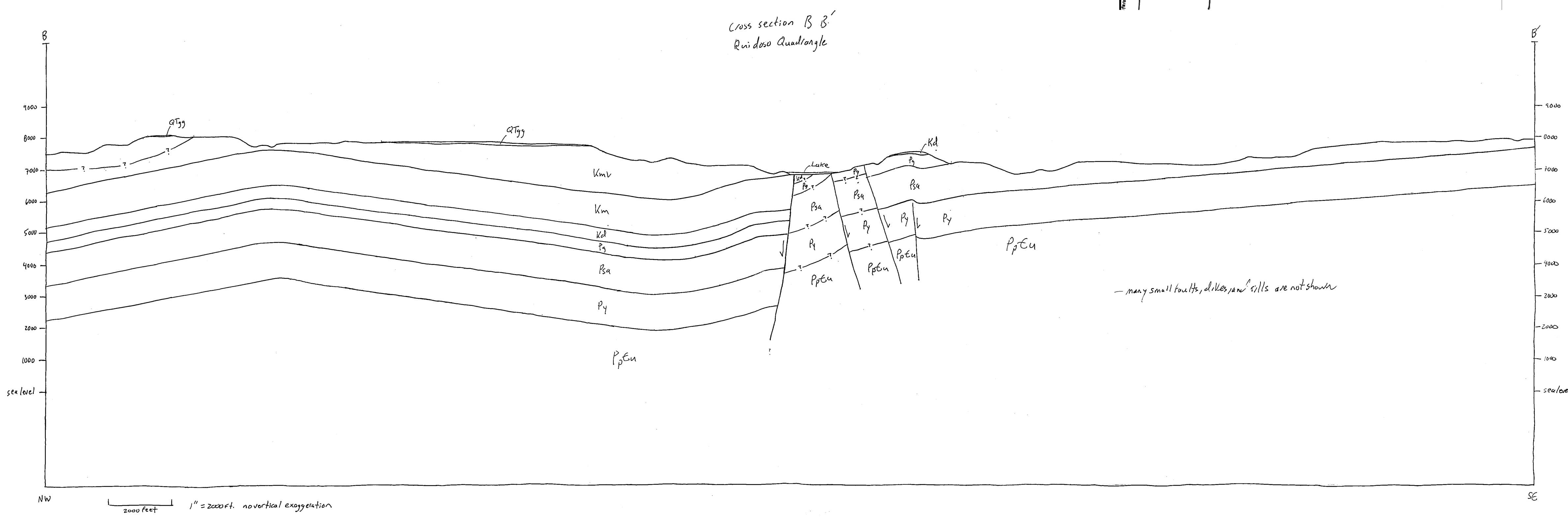
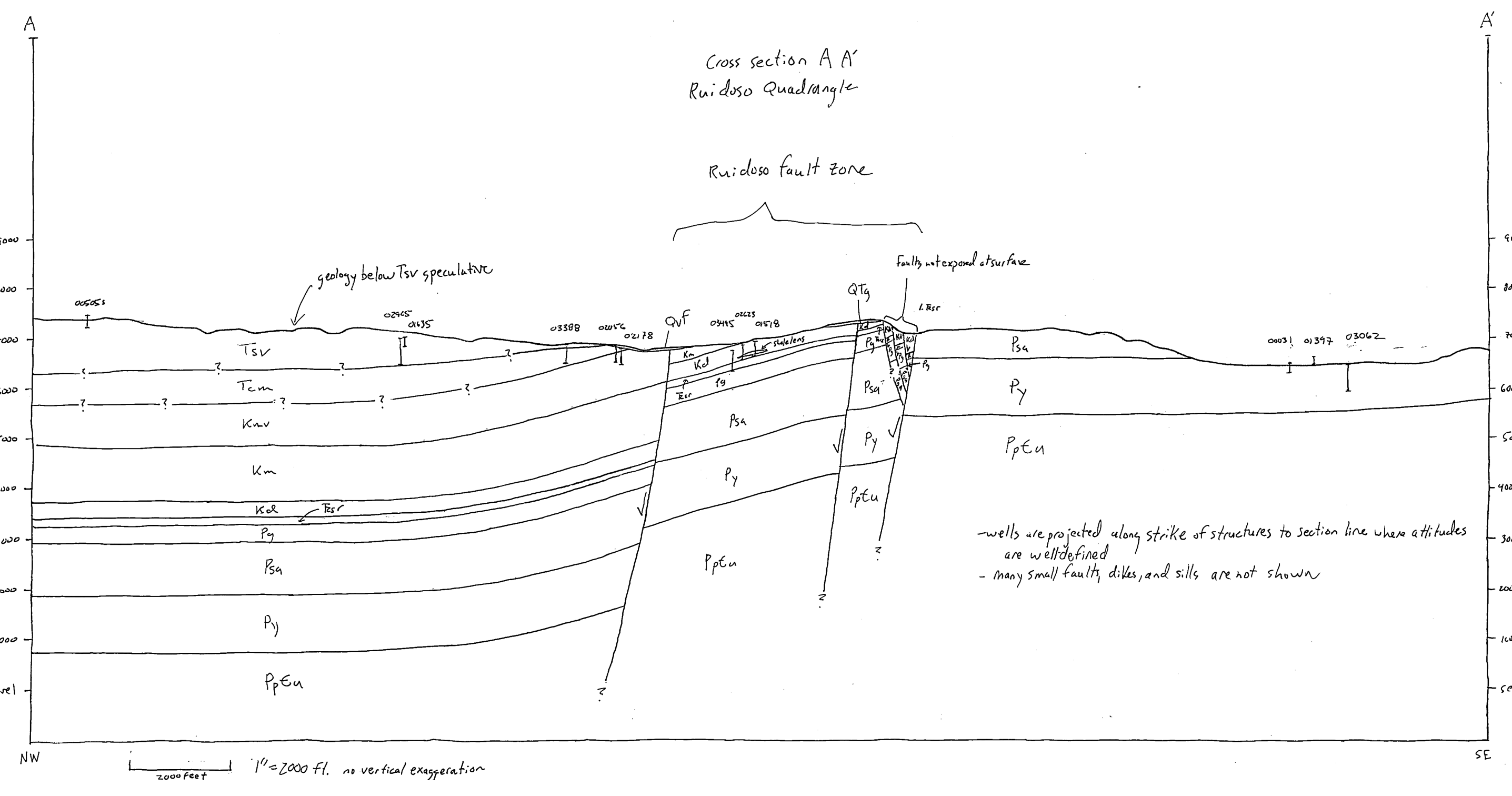
Preliminary Geologic Map of the Ruidoso Quadrangle
OF-GM-93

Mapped and compiled by Geoffrey Rawling

EXPLANATION OF MAP UNITS
(for detailed unit descriptions, see accompanying report)

- Anthropogenic Deposits**
af Artificial fill
daf Heavily disturbed land and/or artificial fill
- Quaternary and Tertiary Surficial Deposits**
Qv1 - Valley fill (upper Pleistocene to Holocene)
Qv2 - Lowest terrace deposit of Rio Ruidoso (Holocene)
Qv3 - Middle terrace deposit of Rio Ruidoso (upper Pleistocene)
Qv4 - Upper terrace deposit of Rio Ruidoso (middle Pleistocene)
Qaf - Alluvial fan deposits (middle to upper Pleistocene)
Qbs - Landslide deposits (lower to middle Pleistocene?)
Qg - Stream gravel deposits (lower to middle (?) Pleistocene)
Qtg - Pediment gravel deposits (Pliocene (?) - lower Pleistocene)
Qtag - Glacial outwash gravel (Pliocene (?) to lowest (?) Pleistocene)
- Cenozoic Igneous Rocks**
Tsv - Sierra Blanca volcanic rocks, undivided (upper Eocene to Oligocene)
Tsv-tp - Trachyphonolitic porphyry flows
Tsv-tf - Trachybasalt flows
- Cenozoic Sedimentary Rocks**
Tem - Cub Mountain Formation (Eocene)
Kmv - Cretaceous Mesa Verde Group, undivided (upper Cretaceous)
Km - Mancos Shale (middle to upper Cretaceous)
Kd - Dakota Sandstone (lower to middle Cretaceous)
Tsr - Santa Rosa Formation (upper Triassic)
- Mesozoic Sedimentary Rocks**
Psa - San Andres Formation (middle to upper Permian)
Py - Yeso Formation (middle Permian)
PpCu - Permian to Proterozoic rocks
- Paleozoic Sedimentary Rocks**
Pg - Grayburg Formation (upper Permian)

- MAP AND CROSS SECTION SYMBOLS**
- Location of geologic cross section
- Geologic contact, solid where exposed, dashed where approximately located, dotted where concealed, queried where inferred
- Normal fault, arrow shows dip and dip direction of fault plane where measured, ball and bar on downthrown side, dashed where approximately located, dotted where concealed. Fault tip is queried where the termination of fault is unknown.
- Anticline, trace of axial plane, dashed where approximately located
- Syncline, trace of axial plane, dashed where approximately located
- Dip and dip direction of bedding, dashed where compiled from Moore et al (1998a)
- Dip and dip direction of joints
- Dip and dip direction of plane of small fault
- Trend and plunge of slickenside striae
- Outcrop and local trace of dike, with dip and dip direction where measured
- Water well with NM State Engineer Office W.A.T.E.R.S. database reference number
- Water well projected into cross section



NOTES AND ACKNOWLEDGMENTS

Geology within Mesalero Tribal lands north of the Rio Ruidoso in the northwest corner of the quadrangle was compiled from Moore et al (1988b). Geology within Mesalero Tribal lands south of US 70 and east of Fence Canyon was compiled from Moore et al (1988a).

I thank Thora Padilla of the Mesalero Apache Tribe for granting access to tribal lands and Ernest Kadayan for escorting me. Dan Abercrombie of the US Department of Agriculture facilitated the access to the Mesalero Lands. Doug Rappuhn of the New Mexico State Engineer's Office kindly provided lithologic logs of water wells in the Ruidoso area.

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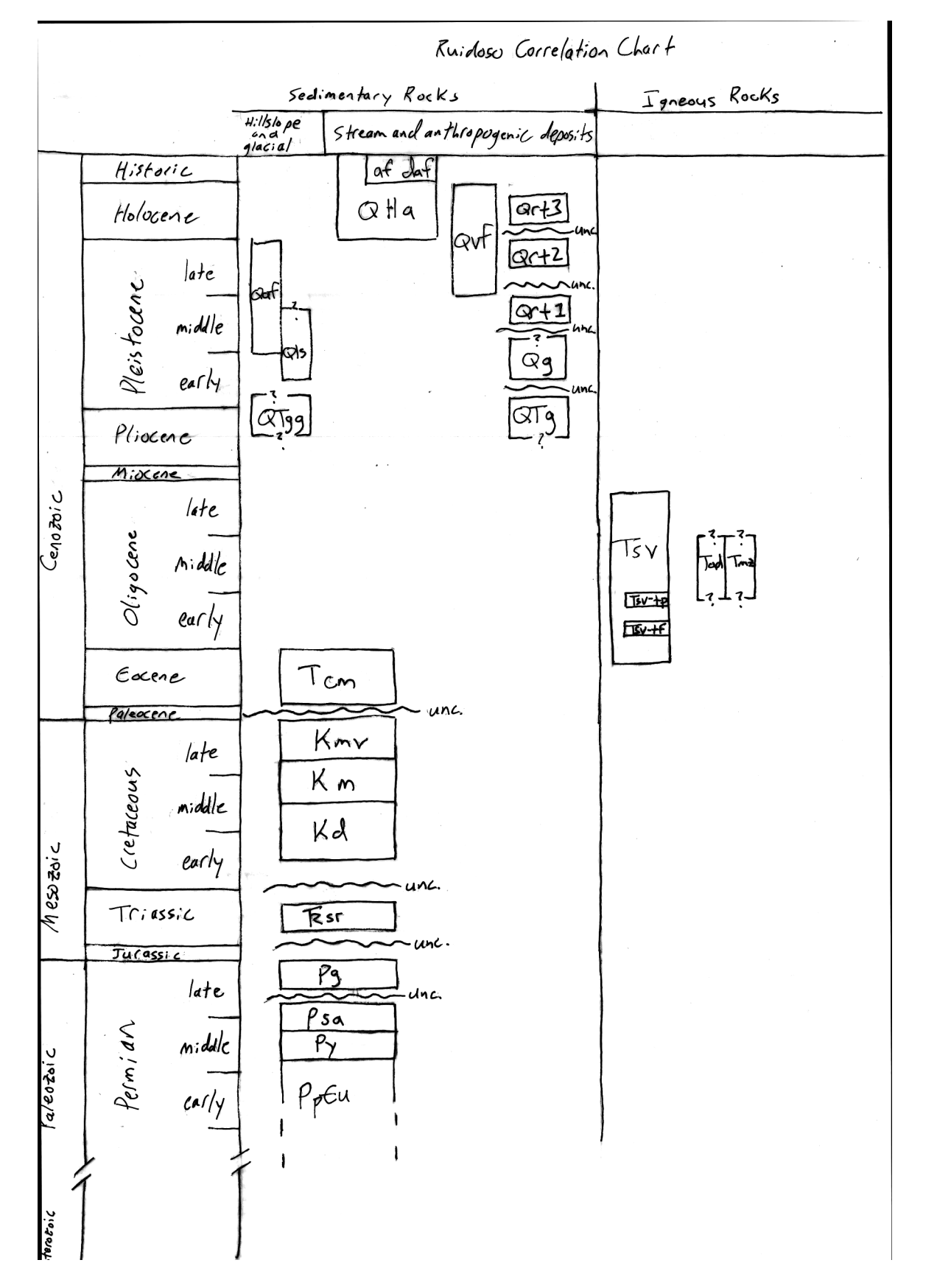
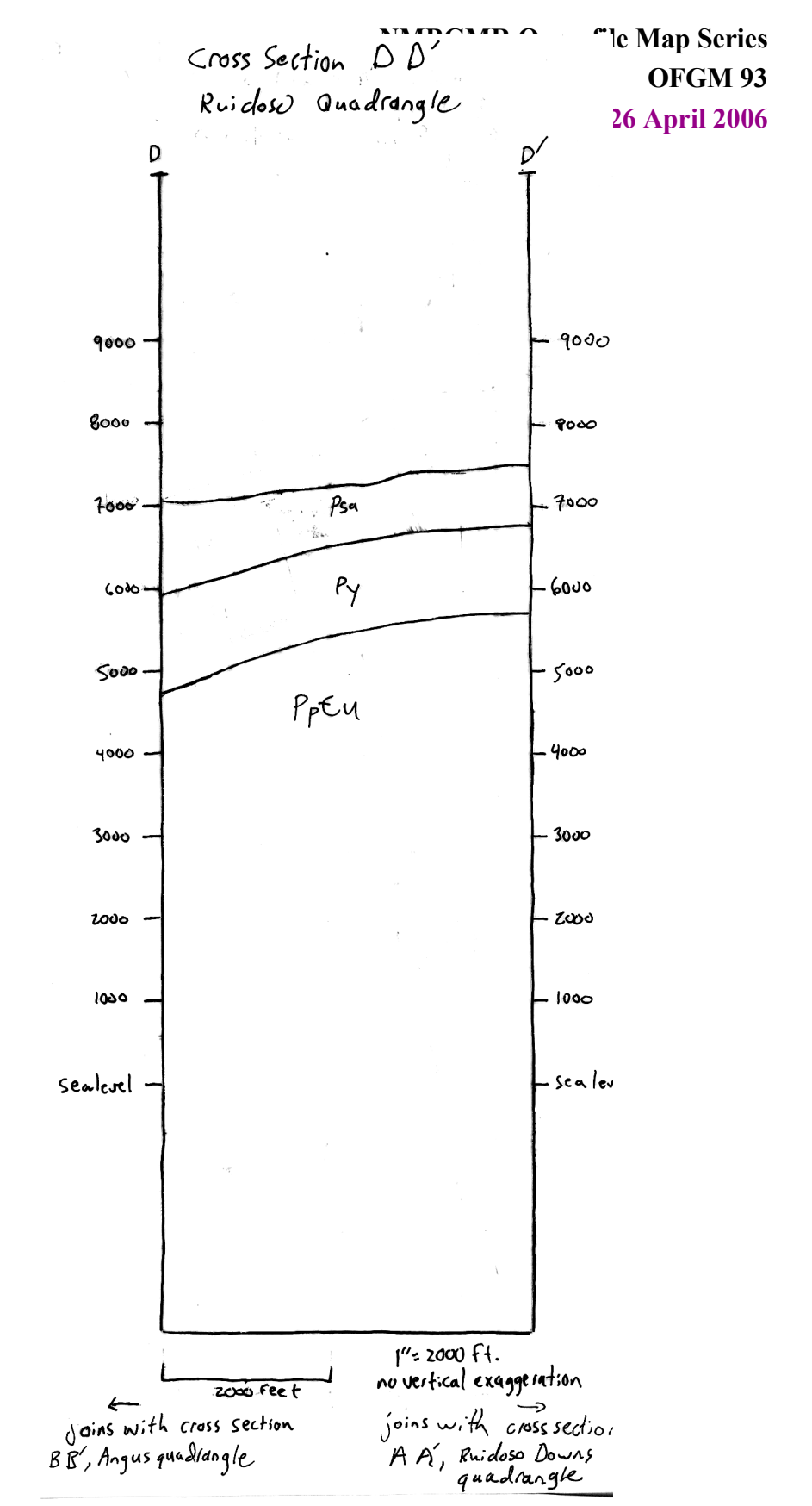
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This draft geologic map is preliminary and will undergo revision. It was produced from either scans of hand-drafted originals or from digitally drafted original maps and figures using a wide variety of software, and is currently in cartographic production. 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 adhering to bureau map standards, it will be released in our Geologic Map (GM) series. This final version will receive a new GM number and will supersede this preliminary open-file geologic map.

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