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(Usually includes a stratigraphic column and/or correlation chart.)

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This is a section from the 2004 NMGS Fall Field Conference Guidebook.

Annual NMGS Fall Field Conference Guidebooks

Every fall since 1950, the New Mexico Geological Society (NMGS) has held an annual [Fall Field Conference](#) that explores some region of New Mexico (or surrounding states). Always well attended, these conferences provide a guidebook to participants. Besides detailed road logs, the guidebooks contain many well written, edited, and peer-reviewed geoscience papers. These books have set the national standard for geologic guidebooks and are an essential geologic reference for anyone working in or around New Mexico.

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Taos Area Stratigraphy and Correlations for Proterozoic and Paleozoic

P.W. Bauer, K.E. Karlstrom, B.S. Kues, J.P. Dawson, M.T. Heizler, M.L. Williams, A.S. Read, D. Ulmer-Scholle

Mesozoic	None exposed				
Paleozoic	Permian	Sangre de Cristo Formation			
	Penn-Sylvania	Alamitos Formation			
Mississippian	Arroyo Peñasco Group		Tererro Formation		Cowles Member
			Espiritu Santo Formation		Mañuelitas Member Turquillo Member Macho Member Carbonate member Del Padre Sandstone Member
The Great Unconformity					
Neoproterozoic	Diabase dikes?		Diabase dikes?		Diabase dikes? 1.0-0.96 Ga Ar-Ar muscovite (cooling through ~350C)
	1.35-1.27 Ga Ar-Ar muscovite (cooling through ~350C) 1.5-1.3 Ga Ar-Ar hornblende (cooling through ~500C)		1.35 -1.19 Ga Ar-Ar muscovite (cooling through ~350C) 1.40- 1.31 Ga Ar-Ar hornblendes (cooling through ~500C)		1.3-1.29 Ga Ar-Ar hornblendes (cooling through ~500C before 1.3 Ga) 1.38 Ga U-Pb titanite (cooling through ~600-500C) 1.42 Ga U-Pb metamorphic zircon growth
Mesoproterozoic	1.44 Ga Penasco quartz monzonite, 1.4 Ga Petaca pegmatites	1.48-1.32 Ga U-Pb metamorphic monazite growth	1.43 Ga U-Pb metamorphic monazite growth		1.42 Ga Pegmatite of Jaroso Canyon
	1.63-1.48 Ga regional stabilization of crust and tectonic lull. Rocks at approximately 10 km depth by 1.48 Ga.				
Proterozoic	1.67 Ga Rana quartz monzonite, 1.68 Ga Puntiagudo granite, 1.68 Ga Guadalupita pluton		1.68 Ga Ar-Ar hornblende from Quartz diorite of Cimarron River (cooling through ~500C)		1.64 Ga Quartz monz. of Costilla Ck, 1.68 Ga Granodiorite of Jaracito Cn
	Hondo Group (Piedra Lumbre, Pilar, Rinconada, and Ortega Fms)		Hondo Group? (quartzite and pelitic schist)		Hondo Group? (quartzite and pelitic schist)
Paleoproterozoic	Vadito Group (1.70 Ga Burned Mtn Fm, Glenwoody Fm, Marqueñas Fm, Big Rock Fm, schist, amphibolite)	1.69 Ga Tres Piedras granite, 1.69 Ga Tusas granite, 1.7 Ga (Rb-Sr) Rio Brazos trondhjemite	Vadito Group? (layered gneiss; mafic, felsic, and pelitic gneiss, amphibolite)	1.70 Ga Granite of Eagle Nest, 1.7 Ga Quartz monzonite of Old Mike Peak	Vadito Group? (layered gneiss; mafic, felsic, and pelitic gneiss, amphibolite)
			1.73 Ga Quartz monzonite of Columbine Creek		1.73 Ga Quartz monzonite of Columbine Creek
			1.74 Ga Gold Hill metagabbro		
	1.75 Ga Maquinita granodiorite		1.75 Ga Tonalite of Red River		
	Moppin Complex (>1.76 Ga mafic-dominated schist & gneiss)		Gold Hill Complex (1.765 Ga mafic to felsic gneiss)		
	Picuris, Tusas & N. Rincon Mtns		S. Taos & Cimarron Ranges		N. Taos Range

All Proterozoic ages are U-Pb zircon unless otherwise noted. Data are from Armstrong & Mamet (1990), Grambling & Dallmeyer (1993), Karlstrom et al. (1997), Karlstrom et al. (2004), Lanzotti & Hanson (1997), Lipman and Read (1989), Miller et al. (1963), Pedrick (1995), Read et al. (1999), Shaw et al. (in press), Ulmer & Laury (1984).

Ancestral Rocky Mtn Orogeny

Grenville Orogeny

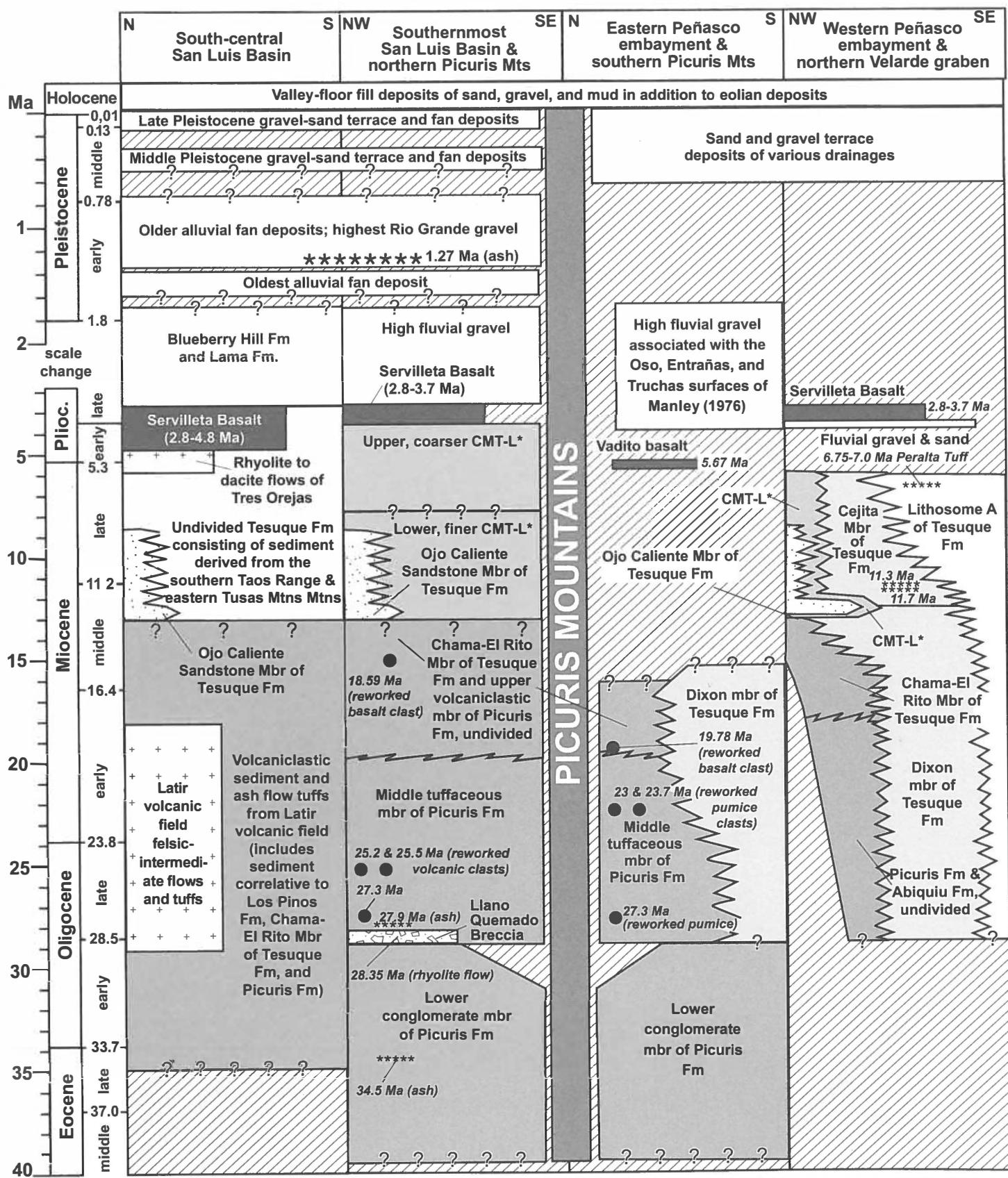
Intracratonic Tectonism

Mazatzal Orogeny

Yavapai Orogeny

Cenozoic Stratigraphy of Region near Taos and Picuris Mountains

Daniel Koning, Scott Aby, Gary Smith, Keith Kelson, and Paul Bauer



* CMT-L = Informal Cieneguilla member of Tesuque Fm as proposed by Leininger (1982) and extended by Koning et al. (this volume), not to be confused with the Cieneguilla Basanite southwest of Santa Fe. This name is problematic and will probably be revised in future work.