

STRUCTURAL SETTING OF THE RINCÓN BLANCO RIFT, ARGENTINA.

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Structural setting of the Rincón Blanco rift, ArgentinaBARREDO, S. P. Laboratorio de Tectónica Andina. Facultad de Ciencias Exactas y Naturales. UBA Ciudad Universitaria Pabellón II, 1428 Buenos Aires. E-mail: silvia@gl.fcen.uba.arRincón Blanco is a Mesozoic half graben system of the Cuyo rift basin located in San Juan Province, Argentina, between 69°10'- 69°15'W and 31°25'-31°35'S. The system lies entirely within the Precordillera fold and thrust belt. It is 5 km wide and stretches approximately 25 km N-S. The infilling consists of 2300 m of nonmarine Triassic coarse conglomerates interfingered with sandstones, shales, tuffs, tuffaceous mudstones and bimodal volcanic rocks. The north striking down-to-the west master normal fault dips steeply at present-day erosion level, but at depth it is assumed to be lystric. It is probably composed of minor segments presently overprinted by a system of antithetic thrusts. Fault-controlled subsidence should have been great enough relative to sediment supply, as inferred by the facies distribution. A tectonic reactivation gave place to a second stage of rifting. The synrift strata are up 1,9 km thick along the south - south eastern margin and is thinning out to the west and north suggesting an asymmetric basin shape. The thermal subsidence reaching 300 m in thickness expanded the primitive sedimentation area.During Tertiary times the basin undergone tectonic inversion resulting in a series of thrust sheets that produced a complex structure. At present, it is a tight asymmetric syncline bounded on the west by east verging typical Andean thrusts. West dipping high-angle thrusts in the southern and eastern sectors of the basin are interpreted as inverted normal faults partially truncated by backthrusts.