## Gallery of Geology - Tierra Amarilla anticline

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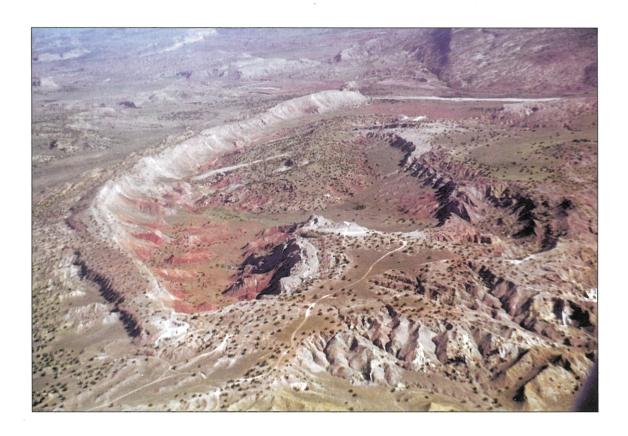
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## Gallery of Geology Tierra Amarilla anticline



This photo, looking north, shows the Tierra Amarilla anticline, located 4 mi southwest of the village of San Ysidro, New Mexico. The feature is a fine example of an anticline and probably the most accessible anticline in New Mexico.

The sharp flanks of this Laramide-age structure are held up by the light-colored Todilto Formation overlying the Entrada Sandstone, both of Middle Jurassic age. The soft underlying slopes are made up of the Upper Triassic Petrified Forest Formation of the Chinle Group.

The raised core of the structure in the valley is underlain by a welt of highly contorted Petrified Forest mudstones and channel sandstones. The core is capped by a carapace of Pleistocene and Holocene travertine. The older travertine reaches a maximum thickness of about 10 m (33 ft). This competent material slopes away from the linear crest, has rifted along an axial fault system, and is gliding and breaking up downslope over the incompetent Petrified Forest mudstones. Some springs are still active and

deposit cascading tongues of light-colored travertine along the north (not seen in this photo) and west sides of the core. The light-colored horizontal strip in the upper right of the photo is the stream bed of the Rio Salado, and just beyond it is US–550 and the southern tip of the Nacimiento uplift.

The southern two-thirds or so of the anticline is on U.S. Bureau of Land Management (BLM) land (secs. 21 and 28 T15N R1E). The northern one-third is on New Mexico state land (sec. 16 T15N R1E). Access to the BLM part is from a parking spot along Cabezon Road on the south. Access to the northern part is either from the same southerly route with a longer walk or from the north over a tricky four-wheel-drive road that crosses a parcel of land recently acquired by Zia Pueblo. One needs to purchase a permit to set boot on the state-owned land.

—Dirk Van Hart Photo taken on May 25, 2001