Structure map of western Kansas (after N. H. Darton).

The numbered black lines show the elevation of the top of the Dakota sandstone above sea level. If the beds above the Dakota are imagined to be removed and the northwest part of the area flooded by water which stands 700 feet above sea level, the 700-foot contour line would represent the shore. If the water were raised by 100-foot intervals the successive shore lines would be represented in turn by the higher contour lines. The top of the Dakota inclines generally to the northeast, but there are local more or less pronounced irregularities.