

GENERAL DESCRIPTION

This township is, for the most part, an area of low relief, varying in elevation from approximately 1,800 ft. in the extreme southwest corner to a maximum of approximately 3,700 ft. near the northwest corner. In the southern five miles the relief is lowest, seldom being more than 100 to 200 feet, but as the northern part is approached the relief gradually increases and reaches 300 to 400 ft. in the northeastern corner and 500 to 1,000 feet in the northwestern corner, where the highest and largest hills occur. The main drainage is in three general directions. Roughly two-thirds of the township, that in the southeastern part, drains in a southerly direction into a fork of the Las Vegas Wash. This portion of the township appears to have once been a plain gently sloping to the south, that is now dissected by numerous small, branching draws. Most of the spurs and knolls are rounded but a few remain flat-topped indicating that the area has not been completely dissected. About the west third of the township, which drains southwesterly into Las Vegas Valley, is a gently sloping plain broken by small draws and washes. An area about $2\frac{1}{2}$ miles in an easterly and westerly direction and one mile in a northerly and southerly direction in the southwest central part of the township is covered by sand dunes. The northern end of the township is more hilly than the rest. A portion along the north boundary drains into a playalake about 8 miles to the north.

The rocks may be divided roughly into three kinds. (1) The oldest are the massive blue-gray limestones that occur in the northern part and form most of the hills. Interbedded with the limestone are a few strata of fine-grained, iron-stained sandstone. Shales in any quantity are notably absent from this series. These strata dip and strike in several directions but the general trend is an easterly and westerly strike and a north dip. (2) The second series of rocks, younger than the massive limestones, occur in the central and southeast parts of the township and consist of nearly horizontal beds of limestone, sandy-limestone, sandstone, sandy-shale, and some chalk. Much of this rock is loosely consolidated. (3) The youngest rocks are the poorly assorted and unconsolidated clay, sand, and gravel of the alluvial fans, the detrital and residual soil, and a hard, firmly cemented limestone conglomerate. This latter rock is quite characteristic of the areas of alluvial deposition and appears to have been formed wherever alluvium, or detritus, has remained for any length of time. It occurs at the surface or a short distance below the surface over considerable areas of the lower lands. A characteristic of the residual soil is the gravelly surface in many places packed very hard, formed by pebbles after the finer material is removed by the wind. The soil in the entire northwestern and northern portion of the township is very shallow and rocky. The extreme southeastern portion is an alluvial clay soil, shallow, fine textured and contains a high gypsum base.

Several roads traverse the township in a general northeasterly direction. The main road, U. S. Highway #91, which is first rate and oil surfaced, extends from a point near the southwest corner of section 19 to the northeast corner of sec. 13. The old St. Thomas-Las Vegas Road runs from the southwest corner of section 31 in a general northeasterly direction until it leaves the