AN INTRODUCTION TO THE FEATURES AND HISTORY OF DAMON MOUND

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Introduction

Damon Mound is a conspicuous large and gently sloping hill in northwestern Brazoria County, Texas, about 72 km (45 mi) southwest of Houston (Figure 1). It is easily reached by taking Highway 59 southwest out of Houston and then taking Highway 36 south to Damon from the intersection near Rosenberg. The mound is the surface expression of an underlying salt dome, undoubtedly the best example of such a phenomena on the Gulf Coast. This section of the guidebook will describe the geomorphology of Damon Mound, introduce the observable geological features, and relate some of the history of the area.

Geomorphology

Damon Mound is oval in shape, approximately 3350 m long and 2440 m wide (11,000 ft and 8,000 ft), covers an area of 675 hectares (1670 acres), and rises 25 m (83 ft) above the surrounding flat coastal plain, thus creating, for the Gulf Coast, an impressive landform. Drainage patterns are radial on the dome and concentric around the margin. The perimeter of the mound corresponds to the limits of the underlying salt diapir. The Dresser Minerals quarry is on the northwest shoulder of the mound, with the two highest points directly south and southeast (Figure 1). The town of Damon is built on the eastern flank of the mound, and its E-W streets run right up the flank from Highway 36.

The mound is surrounded by oil wells which also outline the margin of the underlying salt dome. There are two main subdivisions of the Damon Mound oil field, a northern field which is visible from the road leading to the quarry gate, and a southwestern field which is by far the larger. As with most Gulf Coast salt domes, the area has been extensively drilled, but the great majority of wells at Damon Mound have no electric logs—only driller's logs are available.

The soil at the surface is developed in clays, although occasionally there is some sand or gravel. The clays are calcareous and sometimes contain limy concretions which weather out in ditches.