

SOME OBSERVATIONS ON LITHOLOGIC CHANGES IN THE HETEROSTEGINA ZONE

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ABSTRACT

The name *Heterostegina* sp. is becoming synonymous with limestone. "Het lime" is here used for a hard limestone in which fractures go through the imbedded fossil.

A dip section by means of electric logs from northern Harris County, Texas, to southern Galveston County, Texas, is presented. In the most updip well, *Heterostegina* sp. occurs at a depth near 3000 feet. The lithology in this instance is a calcareous sand. The fauna consists of large *Eponides ellisorae*, *Amphistegina* sp., and *Heterostegina* sp. Bryozoa are also present.

In the middle portion of the section, the lithology is shown to be calcareous mudstone at a depth of 5000 feet. *Heterostegina* sp. is fairly common. *Bolivina perca* appears in this type of environment. At the extreme southern end of the section, at a depth of 8000 feet, the mudstones are only slightly calcareous. *Heterostegina* sp. is rare while *Bolivina perca* is common.

Another dip section through Calcasieu Parish, Louisiana, is presented. The portion of the section in this area containing *Heterostegina* sp. appears to be more calcareous as *Bolivina perca* occurs some distance below this fossil. Some of the wells in this section are located on shallow domes but no true "Het lime" was observed.

A strike section from St. Bernard Parish, Louisiana, through Orleans, St. Tamany and Livingston Parishes is shown. On this section, a *Heterostegina* limestone reef is suggested. Since this probable reef ceases near the Mississippi River, it is postulated that domes from the Mississippi River westward into Texas to Matagorda County on which a true *Heterostegina* lime is found were uplifted prior to the occurrence of *Heterostegina* sp.

LITHOLOGIC FEATURES OF CORES OF JURASSIC LIMESTONE FROM A DEEP WELL IN SOUTH MISSISSIPPI ¹

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ABSTRACT

Fourteen photomicrographs of thin sections show distinctive lithologic features of a series of cores of limestone of Jurassic age from depths of about 19,000 to 20,000 feet in the George Vasen Fee well 1, Stone County, Miss.

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