

A MICROFAUNAL RANGE CHART OF THE DISCOVERY WELL OF THE FLOUR BLUFF FIELD, FLOUR BLUFF, TEXAS

R. W. Harris, H. R. Born, W. W. Butcher, W. J. Hilseweck, H. N. Tappan, Norman. Oklahoma

This paper is based upon the examination of well cuttings from the Barnsdall-Hulbert Phillips No. 1 important well of the Flour Bluff Field, near Corpus Christi, Texas. A total of 82 samples ranging in depth from 4,188 feet to 7,409 feet, was examined. From the microfauna in the samples approximately 75 species of Foraminifera and Ostracoda were selected in order to construct the chart accompanying this paper.

Seven different first-occurrence zones are established on the chart. These include the well-known Discorbis, Heterostegina, and Marginulina

zones of the Gulf Coast Oligocene.

Zone 1 (Miocene) includes Rotalia beccarii and two unnamed species of

Cytherideis. It is 1,180 feet thick.

Zones 2 and 2a (Discorbis zone of the unnamed Oligocene) have a combined thickness of 455 feet. Zone 2 is characterized by the first occurrence of Discorbis villardeboana, Nonion grateloupi, Nonionella pizarrensis, Asterigerina miocenica, and others. It is here 195 feet thick. Zone 2a (sub-zone of the Discorbis zone) is based upon the first appearance of Martinottiella sp. "A," Hemicristellaria wetherelli, and Eponides antillarum. It is 260 feet thick.

Zone 3 (of the unnamed Oligocene) is characterized by *Uvigerina* (finely striate), *Nonionella subauracana*, *Siphonina cf. jacksonensis var. limbosa*, and *Quinqueloculina bicornis*. This zone is characterized by the occurrence of numerous species common to the Vicksburg in the Mississippi area. Zone 3 is 150 feet thick.

Zone 4 (Heterostegina zone of the unnamed Oligocene) carries with Heterostegina cf. antillea, Textularia warreni, Bolivina beyrichi var. alata. Discorbis villardeboana var. magnus, Cythereis chawneri, and others. It is

280 feet thick.

Zone 5 (Marginulina zone of the unnamed Oligocene) contains the typical Marginulina philippinensis (flat), M. pulchra (cylindrical), Nodosaria adolphina, N. filiformis, N. vertebralis, and Quinqueloculina vulgaris. It is here 182 feet thick.

The top of zone 6 marks the top of the Frio and contains Liebusellus byramensis var, turgida, Uvigerina cf. pigmea Cushman (coarsely striate),

and Nonion advena. It is here 585 feet thick.

Zone 7 (of the Frio) is based upon the first occurrence of *Trochammina* cf. teasi, Martinottiella sp. "B," Pyrulina cylindrica, and Cassidulina crassa. It is here 389 feet thick.

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