

CONODONTS FROM THE FORT PENA
FORMATION, MARATHON BASIN,
BREWSTER COUNTY, TEXAS

by

Lael Ely Bradshaw

University of Texas, Ph.D. thesis, June, 1966

Sixty-six species belonging to 35 conodont genera are described from the early Middle Ordovician Fort Pena Formation of the Marathon Basin, West Texas. Four new genera, *Diflabella*, *Distacodella*, *Oistadella*, and *Tripedus*, 20 new species and one new subspecies are proposed. The fauna contains elements found in the Pratt Ferry Formation of Alabama, the Joins Formation of Oklahoma, the Martinsburg Formation of New Jersey and the Pogonip Limestone of Nevada. It also has species in common with the Crassicauda Limestone of Sweden, the Ampyx Limestone of Norway, and with Ordovician shale and chert units in Scotland.

The Fort Pena Formation is an example of the graptolitic shale facies that has been interpreted as geosynclinal in origin. It is also interpreted as being deposited in a shallow offshore marine environment. Igneous and sedimentary source rocks as well as allochemical constituents contributed fragments to the area of accumulation. Volcanic rock fragments and plagioclase feldspar may indicate volcanism during deposition of the Fort Pena.
