A PETROGRAPHIC ANALYSIS OF THE HOME CREEK LIMESTONE  
(UPPER PENNSYLVANIAN), NORTH CENTRAL TEXAS

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The purpose of this investigation is to acquire an under-
standing of environmental conditions existing during
deposition of the Home Creek Limestone. In order to achieve
this objective, it is necessary to distinguish and determine
distribution of microfacies within the Home Creek Limestone.

LOCATION

Field work for this investigation was conducted in the
summer of 1981 in an area bounded on the north by the
southern shores of Possum Kingdom Lake in northwestern Palo
Pinto County, and extending in a general southerly direction
along outcrop of the Home Creek through eastern Stephens
County and northeastern Eastland County, Texas (Figure 1).

PREVIOUS WORK

The earliest of numerous investigations of the Pennsylvanian
System of north central Texas was completed by Tarr (1890).
Tarr named and described in the Colorado River Valley
several lithologic units from the Carboniferous and Permian
Systems. Tarr’s interests were primarily directed at coal-
bearing sequences and, as a consequence, he paid little
attention to the thick limestone-shale sequence which would
later be called the Canyon Group.

Cummins (1891), working in the Brazos River Valley, was the
first to recognize that the coal-bearing sediments belonged
to the Pennsylvanian System. The name Canyon “Division” was
also applied by Cummins for exposures of a massive limestone
sequence occurring near the town of Canyon, Palo Pinto
County. Boundaries of the Canyon “Division” were placed at
the base of the lowest limestone and at the top of the
uppermost limestone. These limestones were later named by
Plummer and Moore (1921) as, respectively, the Palo Pinto
Limestone and the Home Creek Limestone.

Drake (1893) working in the Colorado River Valley named many
of the units within the divisions proposed by Cummins (1891).
Most notably, for this report, Drake named the Home Creek
Limestone for exposures on Home Creek, southeastern Coleman
County.