SOME ASPECTS OF SUBSURFACE GEOLOGIC CORRELATIONS [1]

by

CARL A. MOORE[2]

Abstract

Surface correlations based largely on paleontologic criteria are being carried into subsurface work, often resulting in erroneous correlations. Type surface sections depend on many unconformities and sharp faunal changes for their delineation. In the basins, there are few if any unconformities and there are few readily identifiable faunal changes to denote the contacts between formations and groups. Consequently there will be a mixing of faunas such that it is difficult to designate by paleontology a definite contact between two formations.

Paleontology, paleobiology and lithology must be augmented by electric log analysis and study of sedimentation as bases for subsurface correlation.

All techniques should be used for sub-surface correlation. Paleontology should, however, be used as a tool to supplement sub-surface geologic correlations, rather than making geologic correlations fit into paleontologic correlations.

THE GEOLOGY OF SHELDER FIELD, DIMWITT COUNTY, TEXAS

by

THOS. D. BARBER[3]

Abstract

Although it has received very little publicity, Shelder Field, discovered in early 1930's, should be studied by all geologists because it clearly represents the link between the old oil finding method and the new or modern exploration technique. Many recently developed exploratory tools were first introduced experimentally at Shelder Field. In chronological summary the successful culmination of the well-coordinated efforts of the Surface Party, Geiger Counter, Torsion Balance, Magnetometer, Seismograph and Core Drill coverage is described. The productive history of this type of reservoir is graphically demonstrated.

An amazing similarity between the discovery, development and performance of Shelder Field and many fields in the Mid-Continent Area will be noted.

[1] This paper was presented to the Tulsa, Oklahoma City, and Shawnee Geological Societies during October and December, 1952, and January, 1953. The entire paper was published in the SHALE SHAKER (Oklahoma City Geological Society) Vol. 3, No. 7, March, 1953.

[2] University of Oklahoma, Norman.

[3] Stanolind Oil and Gas Company, Corpus Christi, Texas.