— University of Mosul —
College of Petroleum & Mining Engineering

Title of the lecture

Lecture fourth

Ammar Algburi

Petroleum Reservoir Engineering Department

Email: ammar.ali@uomosul.edu.iq

LECTURE CONTENTS

Study of folds

Direct observation

Drilling

Mining

Geophysical methods

Top and bottom of beds

fold, in geology, undulation or waves in the stratified rocks of Earth's crust. Stratified rocks were originally formed from sediments that were deposited in flat horizontal sheets, but in a number of places the strata are no longer horizontal but have been warped. Sometimes the warping is so gentle that the inclination of the strata is barely perceptible, or the warping may be so pronounced that the strata of the two flanks may be essentially parallel or lie nearly flat (as in the case of a recumbent fold). Folds vary widely in size; some are several kilometres or even hundreds of kilometres across, and others measure just a few centimetres or less. The tops of large folds are commonly eroded away on Earth's surface, exposing the cross sections of the inclined strata

Folds are generally classified according to the attitude of their axes and their appearance in cross sections perpendicular to the trend of the fold. The axial plane of a fold is the plane or surface that divides the fold as symmetrically as possible. The axial plane may be vertical, horizontal, or inclined at any intermediate angle. An axis of a fold is the intersection of the axial plane with one of the strata of which the fold is composed. Although in the simpler types of folds the axis is horizontal or gently inclined, it may be steeply inclined or even vertical. The angle of inclination of the axis, as measured from the horizontal, is called the plunge. The portions of the fold between adjacent axes form the flanks, limbs, or slopes of a fold.