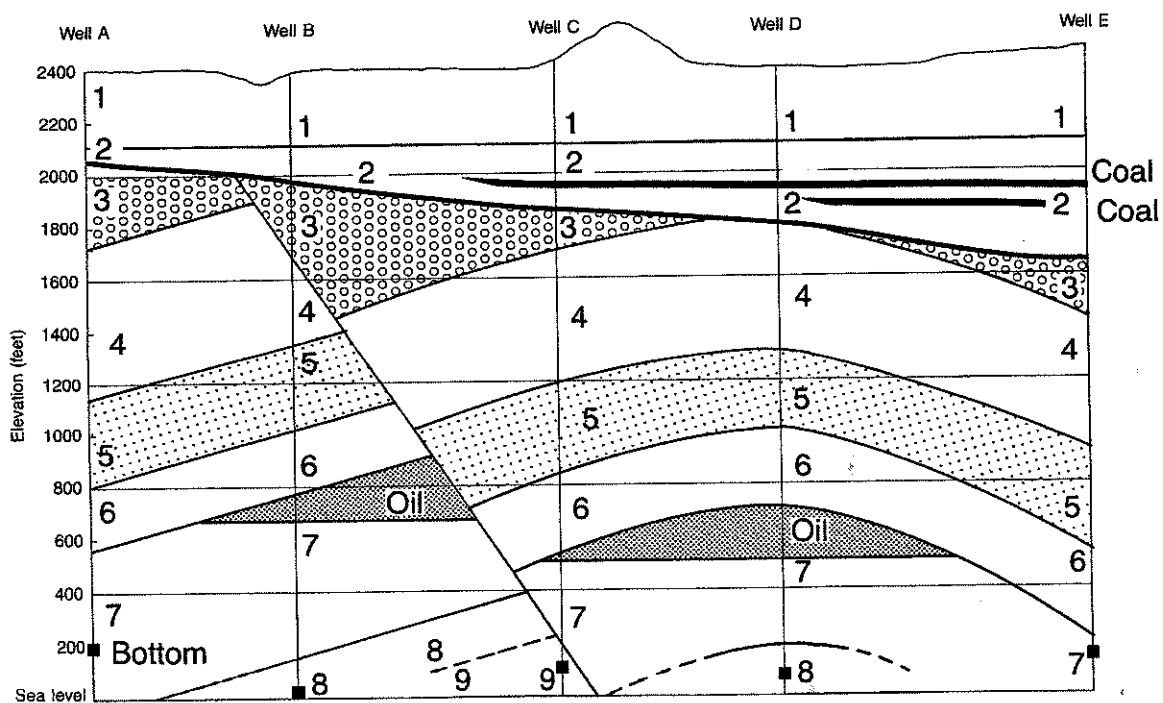


16. Oil is less dense than water and does not mix with water, so it rises to the top of reservoir beds that contain both oil and water. The oil wells occur at the upper end of a tilted reservoir bed where it is capped by impervious rocks at a fault (well B) and at the top of an antiform fold (wells C and D) because this is as high as the oil could migrate as it floated on the water.
17. Wells A and B have no oil, because they cut through the reservoir beds below the level where oil would have been floating on water. Wells B, C, and D all cut through the reservoir beds at a level high enough to encounter the oil.
18.
 - Units 9 through 3 are sediments deposited as horizontal sheets, one atop the other, from 9 to 3. Other units may have been present on top of unit 3, but they no longer exist, if they ever did.
 - The sequence of units 9 through 3 was folded and then cut by a normal fault.
 - Erosion removed units above unit 3 and the upper parts of units 3 and 4.
 - Units 2 and 1 were deposited (in that order) on top of the erosional surface to form an angular unconformity.
 - The top of unit 1 is at the present surface of the land and is being eroded presently to form an unconformable surface.

Completed Figure 8.19: Part 8E



Cross section showing well locations.