

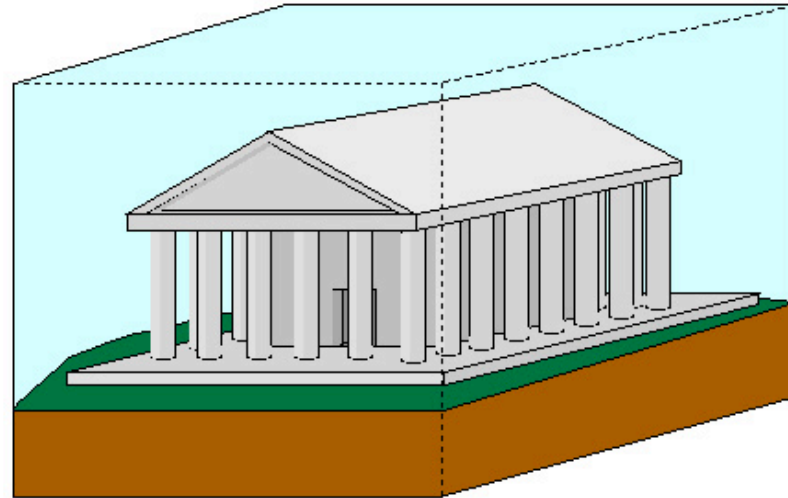
Maps and cross-sections I

Petroleum geologists commonly envision subsurface geologic features in terms of maps and cross-sections. A map is a representation of a horizontal or nearly horizontal surface. In cases where that surface is not horizontal or not planar, geologists commonly use contours to show the shape of the surface. One can think of a map as a view from above, as in the example at right. However, for geologists working with the subsurface, this would be a view through rock positioned above the surface in question.

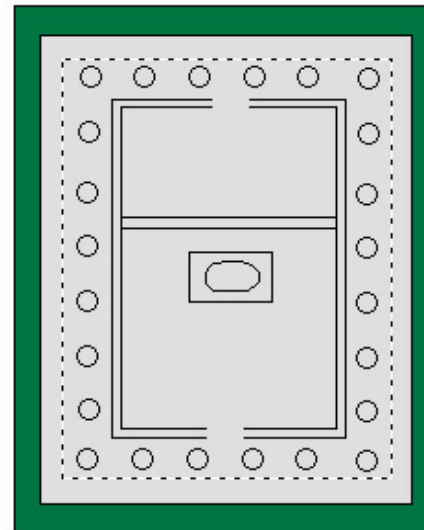
A cross-section represents how something would look on a vertical plane, as if one could slice through the sectioned object. The example at right shows one of a infinite number of possible cross-sections through the simple temple shown in the block diagram. Other cross-sections could be parallel to the one shown, or they could be oblique (at an angle) to the one shown.

In petroleum geology (and other subsurface geology), we do not have information about the entire structure that we must portray. Instead, we typically have information from boreholes that were drilled for previous exploration or production. Part II of this series proceeds with that thought.

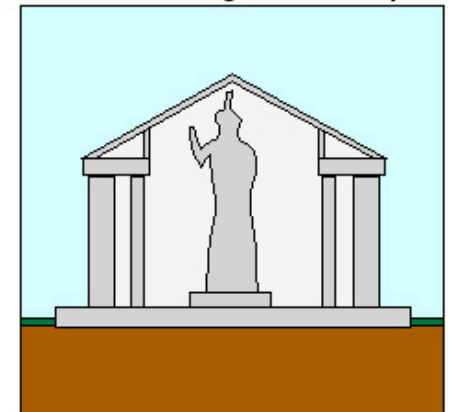
Block diagram: Three dimensional view



Map view: View from above



Cross-sectional view: view from side as if feature were cut along a vertical plane



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