

Isopach maps

An isopach map shows the areal variation in the thickness of a stratigraphic unit. To construct an isopach map from borehole logs, one locates the top and bottom of the stratigraphic unit on a given log, subtracts the lesser depth from the greater, and plots the resulting thickness on a map. Repetition for each of the available logs

generates the data that are then contoured on the map. Here, the result is a map of the thickness of the fictitious Webster Formation.

Variants on this theme are maps that show the cumulative thickness of a particular kind of interval. For example, a map of Webster net reservoir thickness would have values of 303 for the northwestern

of our two illustrated boreholes and 382 for the southeastern one. A map of Webster pay thickness would have 0 for the northwestern well and 64 for the southeastern one. The resulting maps would be clearly labeled to indicate that they were isopach maps of net reservoir and pay, rather than of thickness of a stratigraphic interval.

