

Use the geologic map of Fig. 3.29 to construct a projected structure contour map of the top of the Fairholme, a potential hydrocarbon reservoir. Use every point where a formation boundary crosses a topographic contour. Post all the elevations on your map before contouring. What is the best method for contouring this map? Explain your reasons. Is the geological map correct? Why or why not? Does the projected structure-contour map agree with the drilled depths to the top of the Fairholme? The wells to the Fairholme were drilled to find a hydrocarbon trap but were not successful. What is a structural reason for drilling the wells and what is a structural reason why they were unsuccessful?

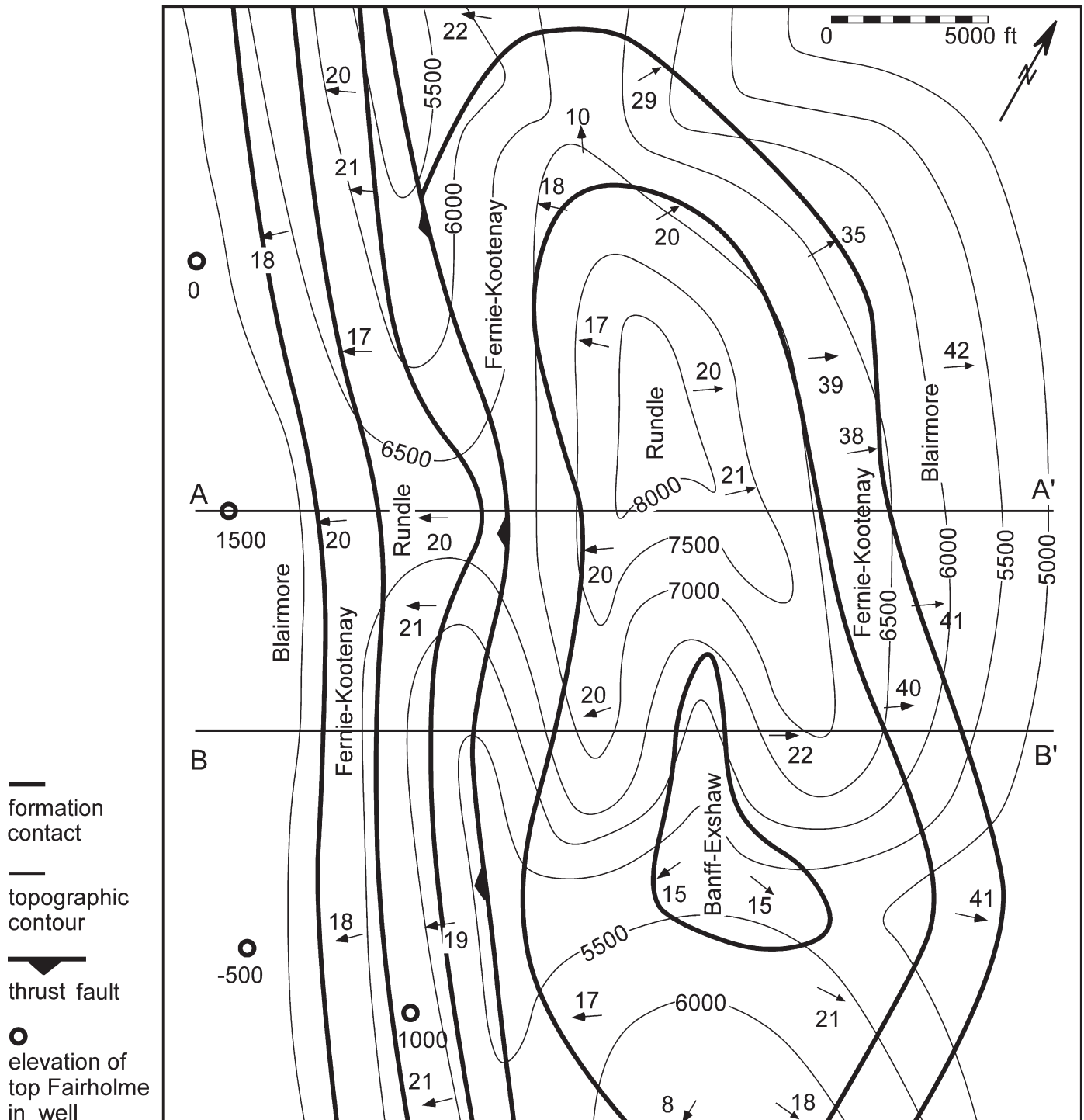


Fig. 3.29. Geologic map from the Canadian Rocky Mountains. All dimensions are in feet. The stratigraphic column (with thickness) from top to base is: Blairmore (2 400), Fernie-Kootenay (700), Rundle (900), Banff-Exshaw (900), Palliser (800), Fairholme (1 200). (After Badgley 1959)