

Map the fault (f) and the shale marker horizon (s) using the data in Fig. 8.54. Is a single fault present? What kind? What is the evidence? What is the attitude of the fault? of bedding in the hangingwall? of bedding in the footwall? What is the heave and throw on the fault? If a heavy liquid is spilled in the stream valley in the shaded area, could the fault provide a barrier to the fluid movement in porous units above the shale marker? Explain the reason behind your answer. Where would a fault trap for fluids lighter than water be located?

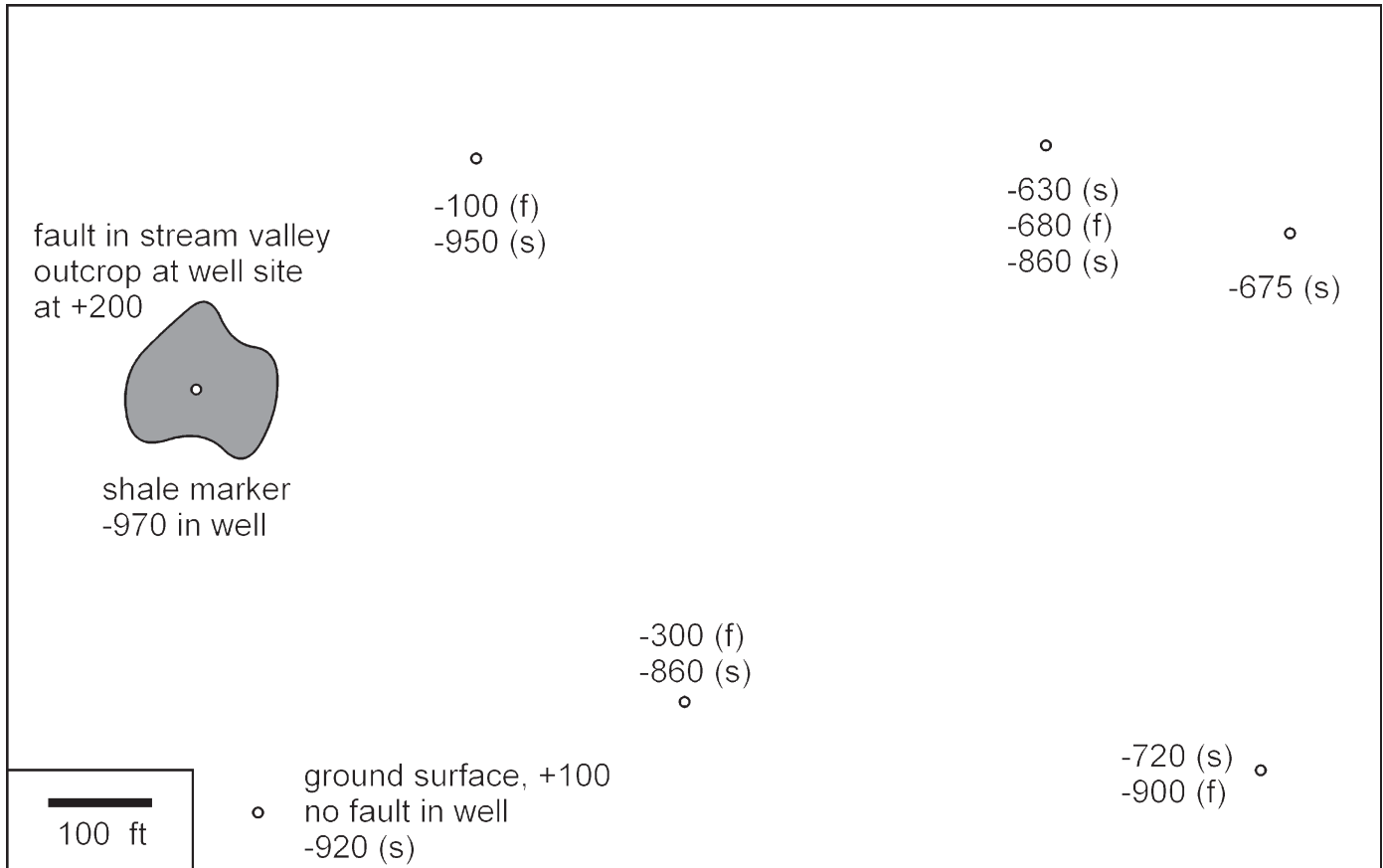


Fig. 8.54. A shale marker and fault cuts in a groundwater basin. Posted on the map are the elevations of fault cuts (f) and of the shale tops (s) in each well where present. Elevations are in feet, negative below sea level