



Figure 40. *Left side of figure*—Surface gamma-ray (GR) profile of the Overbrook Sandstone Member of the Springer Formation (Stop 6B), measured at the MGM Ranch headquarters. *Right side of figure*—Sub-surface well logs from the Samson Resources No. 1 Patzkowsky well for the same stratigraphic interval shown in the surface GR profile. The surface GR profile and the well logs are plotted at the same vertical scale.

central bar complex (upper bar facies) formed along much of the crest of the bar, which is parallel to depositional strike (parallel to the "wall"). Farther to the north, along the northeast flank of the Caddo anticline, it is doubtful that this facies exists.

A comparison of the measured section and the surface GR profile of the Overbrook Sandstone at Stop 6B with the GR log of the same interval in the Samson Resources No. 1 Patzkowsky well shows similarities in all facies (Figs. 34, 40). The upper and lower bar facies on the surface GR profile, although relatively thin where exposed (about 195–184 ft) can be correlated to the 1,976–1,990-ft interval on the Samson well log (Fig. 40). A thick covered interval on the surface probably correlates to a bar transition and shaly interval identified on the well log at about 1,990–2,168 ft. A lower interstratified sandstone and shale zone in the Samson well (about 2,168–2,234 ft) probably

correlates to similar strata exposed at the surface (about 70–20 ft). At the outcrop, this lower unit (Unit 2) is very sandy with numerous shale and siltstone splits, and it is interpreted to be part of a bar transition zone. A comparison of the surface GR profile with the GR profile in the well log indicates, by analogy, that the same lithology probably occurs in the Samson well in the lower bar transition zone as occurs in the surface exposure.

Cuttings from the Goldsmith and Perkins No. 1 Herman Smith well (Units 7–13) (Appendix 3; map inside front cover) indicate that the 160 ft of strata assigned to the Overbrook Member correlate very well with the same interval in the Samson well and also with the exposed Overbrook at Stop 6B, where the Member is 175 ft thick. Although the Overbrook sequence is thinner (60 ft) (Units 8–12) in the Beach & Talbot No. 1 Pruitt BB well, the facies are similar.