



Supplemental road log 3, to Labrier Butte, Oklahoma

Spencer G. Lucas and Adrian P. Hunt
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SUPPLEMENTAL ROAD LOG 3, TO LABRIER BUTTE, OKLAHOMA

SPENCER G. LUCAS and ADRIAN P. HUNT

Mileage

- 0.0 **Turn right** and proceed N on paved highway 0.4 mi E of Kenton (mile 57.9 of First-Day Road Log). **0.1**
- 0.1 Cattleguard. **0.1**
- 0.2 Lytle Sandstone caps butte at 3:00. **0.9**
- 1.1 Sandstone of the Morrison Formation caps cuesta to right. **0.6**
- 1.7 Bridge over Dry Cimarron River. **0.4**
- 2.1 Cattleguard. **0.2**
- 2.3 Unpaved road enters from left; **turn left.** **0.2**
- 2.5 Crest of hill. **STOP 1.** At 4:00 the scar in the hillside (Fig. S-3.1) is Stovall's dinosaur quarry 5 (Hunt and Lucas, 1987). This quarry produced many postcranial elements of sauropod dinosaurs, most of which are assignable to *Diplodocus*. Some bones were well preserved, but most were fragmentary. After stop, **turn around and retrace route** to the pavement. **0.2**
- 2.7 Intersection with paved highway; **turn left** and proceed N. **0.2**
- 2.9 Cattleguard. **0.6**
- 3.5 Cattleguard. **0.8**
- 4.3 Cattleguard. The highway now curves around the eastern end of Black Mesa. **0.6**
- 4.9 The cottonwood bosque to the right is growing along the Dry Cimarron River. **0.2**
- 5.1 Crest of hill. At 12:00, Labrier (Tate) Butte is visible. The sandstone bench at its base is the Entrada Sandstone. **0.3**
- 5.4 Cross Coopers Arroyo. To the east, in the arroyo, are dinosaur footprints (Fig. S-3.2) in sandstone of the Morrison Formation. Conrad et al. (1987) suggest that these tracks occur in the Bell Ranch Formation, but this is unlikely as the "brown-silt member of the Morrison Formation" (= Bell Ranch Formation) is only 8 ft thick

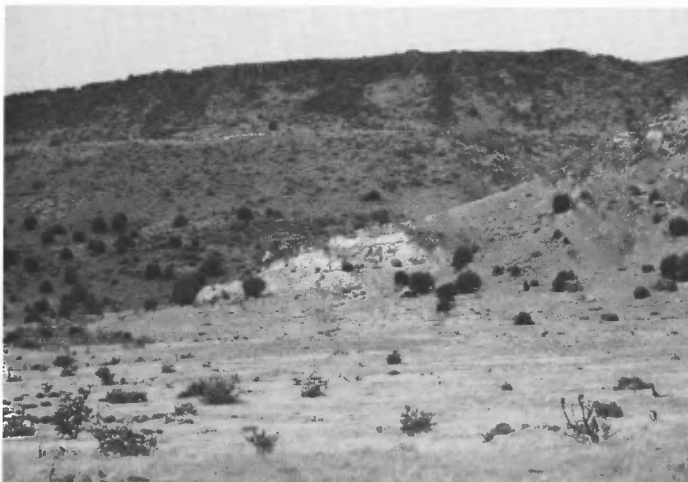


FIGURE S-3.1. View to north at mile 2.5 showing Stovall's quarry 5 and, in the distance, Black Mesa.



FIGURE S-3.2. Dinosaur trackway marked by water-filled depressions in the lower Morrison Formation in Coopers Arroyo near mile 5.4.

- at Labrier Butte (Stovall, 1938; Cooley, 1955). **0.3**
- 5.7 Cattleguard, followed by unpaved road to the left. **Turn left.** **0.1**
- 5.8 **STOP 2.** Quarry in Sloan Canyon Formation at base of Labrier Butte (Fig. S-3.3). The conglomerate in the floor of this quarry has produced metoposaurid amphibian and phytosaurian reptile remains. Most of the bone material is fragmentary, but a partial amphibian skull and a variety of complete teeth have been collected from this locality. The sandstone at the top of the backwall of the quarry is the Sheep Pen Sandstone. The stratigraphic sequence on Labrier Butte, behind the quarry, extends up to the Romeroville Sandstone.

End of Supplemental Road Log 3.

FIGURE S-3.3. Quarry in the Sloan Canyon Formation at mile 5.8. The dark sandstone at the top of the bluff is the basal Sheep Pen Sandstone.