



Supplemental road log 4, to Peacock Canyon, New Mexico

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SUPPLEMENTAL ROAD LOG 4, TO PEACOCK CANYON, NEW MEXICO

SPENCER G. LUCAS and ADRIAN P. HUNT

Mileage

- 0.0 **Turn left** at Carl Taylor Ranch (mile 79.3 of First-Day Road Log). It is necessary to obtain permission from Mr. Taylor to traverse this supplemental road log. It is also advisable to use a four-wheel-drive vehicle. **0.1**
- 0.1 Pass through front yard of Carl Taylor ranch house and **turn right** immediately after the house. **0.1**
- 0.2 **Turn left** and proceed past grain elevators. **0.2**
- 0.4 **Gate. Proceed straight** ahead over the cement slab over the irrigation canal and **then turn right** immediately. **0.2**
- 0.6 Cross the Dry Cimarron River. **0.3**
- 0.9 **Gate. Continue straight** ahead. **0.4**
- 1.3 At 10:00 note the large slump of the Entrada Sandstone onto the slope of Sloan Canyon Formation. **0.6**
- 1.9 **Road forks; bear right.** The low sandstone at 9:00 is the top of the Travesser Formation. **0.6**
- 2.5 **Gate.** **0.4**
- 2.9 Road enters from right; continue straight. Peacock Canyon is visible at 11:00; the canyon at 1:00 is Gripe Canyon. **0.7**
- 3.6 Windmill on right; road bends to left. **0.3**
- 3.9 Road enters from left; continue straight. **0.2**
- 4.1 **Gate.** At 9:00, the section from the Triassic Sloan Canyon Formation through the Cretaceous Mesa Rica Sandstone is well exposed. **0.4**
- 4.5 Peacock Canyon on right. To left, up the canyon, are good exposures of the Sloan Canyon Formation overlain by the Entrada Sandstone. **0.5**
- 5.0 Cross creek. **0.6**
- 5.6 Good exposures of the Entrada Sandstone on the bluffs to left and right. The road is on the Sloan Canyon Formation. **0.9**
- 6.5 **Gate.** Good view of Mesa Rica Sandstone capping bluff at 12:00. The white sandstone immediately ahead is the Entrada Sandstone. **0.1**
- 6.6 **STOP 1.** River course to right exposes flaggy sandstones and limestones of the Sloan Canyon Formation covered with the footprints of fossil reptiles (Fig. S-4.1). Parker (1933) originally mentioned these footprints, and they were described subsequently by Baird (1964), Lockley (1986) and Conrad et al. (1987). **After the stop, continue S** on the dirt road up Peacock Canyon. **0.1**
- 6.7 Road drops below floodplain surface at southernmost end of the trackway exposure and crosses Peacock Canyon. **0.3**
- 7.0 **Intersection; turn right.** **0.4**
- 7.4 **Gate.** **0.1**
- 7.5 Road to right; **turn right.** **0.1**
- 7.6 Cross tributary of Peacock Canyon. **0.1**
- 7.7 Clastic plug at 3:00 up the hill. Continue to **follow the jeep trail** as it bears S. **0.3**
- 8.0 Intersection with county road; **turn right.** **0.5**
- 8.5 **STOP 2.** Clastic plug on right. Good exposures of the



FIGURE S-4.1. Vertebrate trackway site at Peacock Canyon. A, Overview of the track-bearing strata which crop out in the bed of the stream. B, Footprint of *Apatopus*. C, Footprint of *Chirotherium*.

Sloan Canyon in the roadcuts. Red sandstone ahead across the valley is Travesser Formation. We are in the Peacock Canyon Mining District, a western extension of the Black Mesa Mining District. Copper mining began here in 1900 when the Limited, Yellow Bird, Monarch, Gray Eagle, White Dove, Copper Glance, Peacock and other claims were located in secs. 7, 18 and 19, T31N, R34E and secs. 13, 24 and 25, T31N, R33E. Copper mineralization is in the sandstones and clastic plugs of the Sheep Pen Sandstone. This mineralization is spotty, and the overall grade is low. A dump sample near a shaft in SW¹/₄, sec. 33, T31N, R33E contained 1.17% copper, a trace of gold and 0.3 oz silver per ton

(Soulé, 1956, p. 20). Malachite and azurite are the copper minerals. Mining in the district was short-lived. After the stop, **continue on road to the N.** 0.3

- 8.8 Good view down Gripe Canyon at 1:00–2:00. 0.6
 - 9.4 Large clastic plug on left. Several plugs are visible near the road for the next 2.8 mi. 2.8
 - 12.2 Cattleguard. 0.9
 - 13.1 Cross Dry Cimarron River. 0.1
 - 13.2 Cattleguard. 0.2
 - 13.4 Cattleguard and houses; **turn left.** 0.6
 - 14.0 Cattleguard. 0.5
 - 14.5 Cattleguard at intersection with NM-370.
- End of Supplemental Road Log 4.**

SUPPLEMENTAL ROAD LOG 5, FROM TRAVESSER PARK TO FOLSOM

ADRIAN P. HUNT, SPENCER G. LUCAS and BARRY S. KUES

Mileage

- 0.0 **Proceed straight on NM-325** at junction with NM-370 (mile 89.0 on First-Day Road Log). Baldy Hill Formation is exposed to the right of the road. We are crossing the trend of the Guy Monocline which drops the Dakota down to the east by as much as 400 ft. In this area, the monocline trends northward, but near the Colorado line it trends to the northeast (Baldwin and Muehlberger, 1959). 0.7
- 0.7 Baldy Hill visible between 11:00 and 2:30 consisting of the Travesser Formation overlain by the Entrada Sandstone, Morrison Formation, Glencairn Formation and Mesa Rica Sandstone. Low slopes below the hill are composed of the Baldy Hill Formation. 0.5
- 1.2 Road to Spool Ranch on right; proceed straight; Cobert Mesa visible at 1:00–3:00. 0.1
- 1.3 Cattleguard. 1.0
- 2.3 Highway crosses bridge; windmill on left at 11:00. Baldy Hill Formation is exposed in low outcrops at 3:00. 1.3
- 3.6 Blocks of Mesa Rica Sandstone to left. 1.3
- 4.9 Highway crosses Dry Cimarron River. At 2:00 is a good view down Long Canyon. A major gas pipeline follows the base of this canyon into Colorado. 1.9
- 6.8 Good exposures of Travesser Formation and unconformity at base of Entrada on right. Pre-Entrada structure cannot be identified west of this area. Note very thin Morrison Formation to the north in contrast to the thicker section exposed on the south side of the valley. 2.1
- 8.9 Bear **hard left** at ranch. 0.4
- 9.3 Beginning of **blacktop.** 0.2
- 9.5 Bridge over Dry Cimarron. 1.5
- 11.0 Entrance to Cross L Ranch on right. Travesser Formation well exposed to left. 1.1
- 12.1 Bridge over tributary of Dry Cimarron, which originates in Cow Canyon to the south. 2.4
- 14.5 Cross bridge. 1.1
- 15.6 Cross bridge. From 10:00–11:00 is first view of Raton basalts capping mesas. 0.5
- 16.1 Raton basalt at 3:00. 0.7
- 16.8 Cross bridge. Bridge Mesa at 9:00. 0.7
- 17.5 Good exposures of the white sandstone of the Lytle Formation at 2:30 near top of mesa. Several small canyons, including Leonard's Canyon, have been cut down through the mesa to the north of the road; they drain the slopes of Devoys Peak. The mesa 3 mi to the north of Devoys Peak is capped by an isolated exposure of the Raton basalt which once extended in a continuous sheet from this area westward to Raton and Trinidad. 0.7
- 18.2 Blocks of Mesa Rica Sandstone on right. Brigg's Canyon, which skirts the east side of Emery Peak and drains Purvine Mesa and Gaylord Mountain, at 9:00. 1.2
- 19.4 Colluviated Morrison Formation on right. 0.3
- 19.7 Crest of ridge. The most westerly outcrops of the Travesser Formation, overlain by basalt, can be seen at 10:00–11:00 on an unnamed mesa. 2.5
- 22.2 **Intersection** of NM-325 and NM-551 at mouth of Tollgate Canyon. **Turn left,** continuing on NM-325 south toward Folsom. Alps Mesa at 12:30–2:00. The valley of the Dry Cimarron was first settled in this area. A freighter named Madison Emery, operating out of Maxwell and dissatisfied with the poor road over Raton Pass, developed an alternate route to Colorado through what later came to be called Tollgate Canyon. Emery and his wife eventually moved to a spot near the mouth of Tollgate Canyon in 1865 and began raising livestock. It had been said that in these early years the grass in the Dry Cimarron Valley grew so high it nearly hid a man on horseback. The hills were covered with pine, piñon and juniper trees, and wild game and fish were abundant (Miller, 1953). A town named Madison grew up around