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SUPPLEMENTAL ROAD LOG 2, FROM RED RIVER ALONG PIONEER CANYON

VIRGINIA T. McLEMORE, THOMAS T. ROBERTS and PAUL W. BAUER

Assembly point: Corner of Main Street and Pioneer Road, Red River, New Mexico.

Distance: 7.1 mi. The upper segment of the log is recommended for four-wheel-drive vehicles only.

Stops: 15

SUMMARY

This route begins in Red River and follows a dirt road south through one of the major canyons in the Red River mining district (Fig. S-2.1). The road was built by miners in 1898 (Pearson, 1986). The round-trip tour is approximately 7.1 mi long and may take 2–3 hours to complete by vehicle. Numbered posts, erected by U.S. Forest Service personnel, are located at points of interest. Some of the historical information presented here was obtained from a brochure on the Pioneer Canyon Trail by the U.S. Forest Service, Carson National Forest. The improved dirt road is accessible to all vehicles for about 2.5 mi; however, past the ford, four-wheel-drive vehicles are recommended. None of the numerous prospect tunnels in Pioneer Canyon are safe to enter, though many of the old buildings still stand. A drive up this canyon provides a fascinating glimpse into the days of gold fever in Red River.

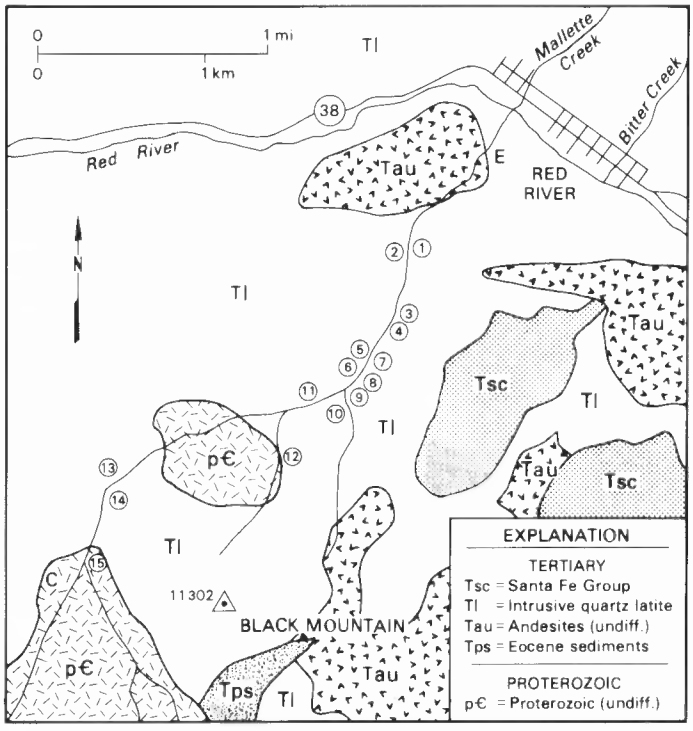


FIGURE S-2.1. Location of prospects along Pioneer Creek, with general geology. Geology modified from Lipman and Reed, 1989. 1 = Ajax; 2 = Dyke; 3 = Silver Tip; 4 = New York; 5 = Rochester; 6 = Hillside; 7 = Creek; 8 = Moberg #2; 9 = Moberg #1; 10 = Moberg #3; 11 = Midway; 12 = Stella; 13 = Anderson; 14 = Crowe; 15 = Inferno; C = Caribel mine; E = Entrance prospect.

Mileage

0.0 Corner of Main Street and Pioneer Road, downtown Red River. **Drive south** on Pioneer Road toward the ski lift, crossing Red River. **0.1**

0.1 Pass Auslander Lodge. High on the hill to the left is the Entrance adit. The Entrance adit is about 23 m long in silicified and pyritized Tertiary quartz latite. No production has been reported from this vein. **0.05**

0.15 **Turn right** onto dirt road at Arrowhead Lodge sign. Ski lift is on the left. **0.05**

0.2 **Cross Pioneer Creek.** Arrowhead Lodge on right. **Turn left** onto Forest Road 485 at Timber Crest sign. Outcrop of altered quartz latite and andesitic lava flows on right at road junction. Quartz latite is gray to tan, porphyritic, and consists of plagioclase, biotite, augite, hornblende and quartz. When altered, the quartz latite is difficult to distinguish from andesitic lava flows. The andesitic lava flows are gray to tan, porphyritic and consist of plagioclase, hornblende, biotite and rare quartz (Lipman and Reed, 1989). Ski slope at 12:00. **0.25**

0.45 Large outcrop on right is a silicified vein, about 6 m wide, along a subvertical fault trending N30°W. **0.35**

0.8 **STOP 1.** The Ajax Tunnel Prospect (gold and copper), located across the creek, consists of two tunnels. One is about 15 m long; the other adit is about 60 m long in brecciated quartz latite (Fig. S-2.2). The mine was located in the 1890's and owned and operated by the three Mallette brothers. Although there is no reported production from the mine, assays were encouraging in 1895–1896, and a small amount of ore may have been shipped during the 1890's. When a new 25-ton mill was constructed in Red River, a group of Colorado capitalists leased the Ajax claim for $25,000. **0.1**

0.9 **STOP 2.** The Dyke Tunnel prospect consists of at least three adits in highly silicified cliff-forming quartz latite. The largest tunnel is only 24 m long with a 67-m crosscut. Several north-trending shear zones up to 1.5 m wide cut the silicified quartz latite, and pyritization is common. Selected samples carry small amounts of gold, copper and molybdenum.

The early history of the Dyke Tunnel prospect is largely unknown. The claims were held for many years by Lily M. Smith. The mine was reopened and enlarged in 1948



FIGURE S-2.2. Brecciated quartz latite near the entrance to the Ajax mine.



FIGURE S-2.3. Looking east at the Moberg house. Mine dumps form the right side of the photo.

by Charles F. Young and R. T. Keeling of Texas. **0.5**

1.4 **STOPS 3 and 4.** On the east side of Pioneer Creek and upslope is the Silver Tip tunnel gold prospect (Stop 3). To the south, at creek level, is the New York tunnel (Stop 4). The Silver Tip mine is one of the oldest and largest workings on Pioneer Creek (Schilling, 1960). The size of the dump adjacent to the caved adit indicates about 610 m of workings. Examination of the dump reveals that the workings are in quartz latite and altered limestone and conglomerate of Pennsylvanian or Permian age. The New York mine is also caved. The volume of the dump indicates about 45 m of workings. Both of these prospects were held for many years by Mrs. Lily M. Smith of Red River. **0.05**

1.45 **STOP 5.** The road passes by the timbered, but now caved, Rochester tunnel. The Rochester gold prospect is in pyritized quartz latite. It was probably first developed in the early 1900's and later reopened and retimbered by Charles F. Young in 1950. **0.05**

1.5 **STOP 6.** The trail on the right leads to Mrs. Lily M. Smith's cabin. Mrs. Smith owned the Dyke, Silver Tip, New York, Rochester and Hillside mines. The Hillside tunnel, located to the left of the cabin (south), extends about 36 m southward.

STOP 7 is across the creek. **Follow the trail northward** to the Creek Tunnel. There is no reported production from the Creek mine. The adit cuts altered pyritized quartz latite and Pennsylvanian-Permian sedimentary rocks. The adit is about 45 m long with a 24-m cross drift. **0.1**

1.6 **STOP 8. DO NOT STOP in the road;** a parking area is ahead. The Moberg #1 Tunnel lies on the left side of the road. This mine was one of eight claims owned and operated by Harry Moberg in the early 1900's. The adit is caved, but the size of the dump indicates a couple of tens of meters of workings. **0.05**

1.65 **STOP 9.** Harry W. Moberg, Sr. and his family lived in this log cabin while operating the Moberg mines (Fig. S-2.3). The middle section of the cabin was built prior to 1900 and the wing rooms were added at some later time. The building in front was used for storage of machinery, the shack in the rear was the outhouse, and the structure on the right side of the road covered a natural spring. Moberg spent most of his life searching for the mother lode. He died in 1935 in Raton without ever finding it (Pearson, 1986).

The Moberg #2 Tunnel is located behind the cabin and is at least 610 m long. The adit cuts quartz latite and Proterozoic metamorphic rocks. In 1946, Moberg shipped several tons of gold ore to Colorado; its assays are unknown. Additional production was probably small. **0.1**

1.75 **STOP 10.** The Moberg #3 mine, a caved adit, lies on the left side of the road. The volume of the dump indicates about 60 m of workings in quartz latite containing veinlets of quartz and disseminated pyrite. **0.05**

1.8 **STOP 11.** The trail on the right side of the road leads to another Moberg claim, the Midway mine. The tunnel is 244 m long and is now caved. One ton of gold ore was shipped to the Golden Cycle mill at Colorado Springs in 1936 (Schilling, 1960), but subsequent production was probably minor. The workings were in altered to unaltered quartz latite and Precambrian metamorphic rocks. North-trending shear zones containing pyrite, quartz stringers and malachite cut the rocks. **0.2**

2.0 **STOP 12.** The trail up the arroyo leads to the Stella mine, also known at various times as the Last Chance, Lulu or Mamie prospects. William Baxter operated the prospect in 1897 as the Last Chance. B. J. Young renamed it the Stella in the 1900's. The adit reportedly follows a north-south shear zone at the contact between Proterozoic metamorphic rocks and Tertiary sedimentary rocks (Schilling, 1960). An estimate of about 600 m for the tunnel length is based on dump volume. **0.8**

2.8 **STOP 13.** The Anderson prospect consists of two short tunnels in Tertiary quartz latite upslope and south of the cabin. Billy B. Anderson located the claim in the 1920's. No production was reported. **0.1**

2.9 **STOP 14.** George (Lee) Crowe lived in this cabin and was well known in the 1920's for his rock garden in front of the cabin. There he planted flowers from around the world and diverted water through the garden, forming a small waterfall and pond. A trail south of the cabin, crossing the creek, leads to the Crowe tunnel. The adit is inaccessible, but the dump indicates about 425 m of workings. At this point vehicles without four-wheel drive

should return. The route ahead is recommended only for four-wheel-drive vehicles. **0.4**

3.3 **STOP 15.** The Inferno mine, on the east side of Pioneer Creek, consists of seven claims (Schilling, 1960) that were patented in 1905 (Survey No. 1179,42178). The main adit is caved, but the dump indicates several hundred meters of workings. This prospect was first worked in the early 1900's by an Italian miner named Moriano. Ore from the main tunnel on the left side of the road was assayed at $60/ton in 1912–1913. The building was erected by A. Picchyi and his sons when they began exploration in 1971 and 1975. At this point **there is no public right-of-way and all vehicles must turn back. 0.25**

3.55 The Caribel or Pratt mine and millsite, consisting of 13 patented claims, was patented in 1922 (Survey No. 1756,865943). H. L. Pratt owned and operated this mine and organized the Caribel Milling and Mining Company in 1910. The remains of a three-story, 25-ton cyanide mill, assay office, bunkhouses, cookhouse, barns and several other buildings are at the site. In 1917, 12 to 24 families lived in cabins near the mine (Pearson, 1986). Upslope about 300 m, Pratt built a ditch to divert water from the creek into a pipe in order to generate pressure to power the waterwheel. In 1913, the mill produced over $2000 of gold and silver (Pearson, 1986). A 32-m long shaft yielded assays of $20/ton in 1915. Several hundred tons of ore averaging $18/ton of gold and silver were traded in 1921 (Schilling, 1960). A number of shallow pits and shafts 4–24 m deep are found south of the millsite. The main shaft had 6 levels and was about 53 m deep. Quartz veins up to 4 m wide with pyrite and calcite, carrying some gold and silver, cut Proterozoic metamorphic rocks, Tertiary quartz latite, Tertiary latite and Tertiary sedimentary rocks. Although total production is said to have been over $100,000, financial problems throughout the 1920's finally forced the closure of the mine in the early 1930's. In 1979, the mill was torn down, and the 70,000 board-feet of lumber in the mill salvaged.

Return to Red River by retracing this route. **3.55**

7.1 Red River.

End of Supplemental Road Log 2.

SUPPLEMENTAL ROAD LOG 3, FROM INTERSECTION OF US-64 AND NM-434 NEAR ANGEL FIRE, ACROSS PALO FLECHADO PASS TO TAOS

ROBERT M. COLPITTS, JR. and CLAY T. SMITH

Distance: 18.9 mi
Stops: 3

SUMMARY

This trip covers a portion of the route traversed by the 1956 New Mexico Geological Society Annual Field Conference third-day road log (Wanek and Read, 1956), crossing numerous exposures of Pennsylvanian strata and Carson Conglomerate(?) of Just (1937) in the Carson National Forest. Much information about the Pennsylvanian section has been acquired in the intervening 34 years through studies by Miller et al. (1963), Sutherland and Harlow (1973), Casey and Scott (1979), Casey (1980a, b) and Smith and Colpitts (1980). Casey (1980a) described a series of stratigraphic sections along this route and used the data to interpret the depositional environments of these rocks. Some of his interpretations are included where appropriate.

This trip provides an opportunity for geologists to examine outcrops of Pennsylvanian-age strata in a deep part of the Taos trough (Rowe-Mora basin of other writers) (Casey, 1980a, b). It also affords an opportunity to compare and contrast these strata with those exposed east of Mora in the southern part of the basin. The best exposures (though apparently thrust-faulted) are exposed on either side of Palo Flechado Pass along US-64. We advise extreme caution when examining these outcrops. The highway has numerous sharp curves and switchbacks that may conceal your presence to traffic. Other exposures of these same strata exist in the canyon south of the highway and near Taos, north of the highway in canyons and arroyos.

Mileage

0.0 **Intersection of US-64 and State Highway 434. Proceed west on US-64.** Valley floor comprises a thick sequence of late Tertiary to Quaternary pediments, lake deposits and stream alluvium. Hills at 3:00 to 9:00 are underlain by Pennsylvanian strata belonging to the Porvenir-Alamitos Formations undivided and Flechado/Sandia Formations (see Colpitts and Smith, 1990, for further discussion). **1.1**

1.1 Outcrop at right is Pennsylvanian sandstone, possibly Alamitos Formation. Old wagon road to Black Lake visible to left from 7:00 to 10:00. **0.1**

1.2 West Moreno Ranch road to right. Entering Carson National Forest. **0.1**

1.3 Rocks to right and ahead along road are coarse-grained, micaceous, feldspathic to arkosic, crossbedded sandstones of the Porvenir-Alamitos Formations. Forest road to left. **Caution: next several miles are steep winding roads with several sharp turns and switchbacks. 0.2**