

## MEMORANDUM

TO: Steve Frost, Coal Geologist, NMBMMR

FROM: H. B. Nickelson, Mining Geologist, Consultant, NMBMMR

SUBJECT: Reclamation evaluation for OSM, Gallup Field, Gallup West,  
Clarke Mine

Clarke Mine 1400' NL, 1600' EL, 14-15-19, Location 20

The Clarke mine was opened by W. A. Clarke, who at one time was a Senator of Montana and a large stockholder in Arizona and Butte, Montana, copper mines. This mine was opened to assure that his copper mines would have the necessary fuel for their operation. W. L. Bretherton was agent and manager of this mine. The mine was opened between 1895 and 1898 on a bed of coal 5' to 7' thick. A slope was 1500' in length in 1898. The mine was ventilated by several shallow shafts to the surface. The best mine equipment was used both underground and on the surface, and other facilities included a power plant, 50 dwellings, a store, a recreational building, and a school house with 40 pupils. In January, 1903, fire was found in the gob. The main entry had been extended 3500', and by 1905 it was extended to 4800'. Several other gob fires in the mine were reported, but good fire walls were constructed and the fires were controlled.

In 1906 the Brown entry was on fire and had to be closed, and a shaft took its place. In 1907, three fires plagued the mine but were controlled. In 1908 the mine was sold to the American Fuel Company, which removed the equipment and closed the mine down. Available records, and an estimate for the years without records, indicate that the mine produced 1,027,000 tons.

Not much evidence of surface openings exists at the mine. It is believed that Location 20 is the main adit of the mine. Another opening shown on an old map and numerous shafts which were reported were not found. Recent bulldozing has probably covered much of this evidence. In the valley floor at the NE corner of section 14 and the NW corner of section 13 is a fairly large area that shows the effects

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of subsidence. Holes are present that are 6' to 8' deep with deep gullies in the arroyo breaching the slump holes. The area in the valley is dissected by small deep arroyos. The land is occasionally used for grazing.

Photos taken about the area are as follows:

G-13-9 This is what I believe to be the main entry of the Clarke mine. It was taken looking west. Foundations are in the vicinity, probably those for the boiler plant. At the base of the white cliff is a mine tram road. The railroad grade is about 300' from the camera. The photo was taken from the burned screening pile.

G-13-10 I moved down the refuse pile a short distance and took this photo. The white cliff is at the right, the tram road shows, and the portal of the main entry is just beyond the gap in the tram road. The dump at the right of the water is from recent dozing. The dump in the foreground is burnt screenings. The only evidence of the portal is a cap sticking out of a depression.

G-13-11 Looking east, to show the refuse dumps.

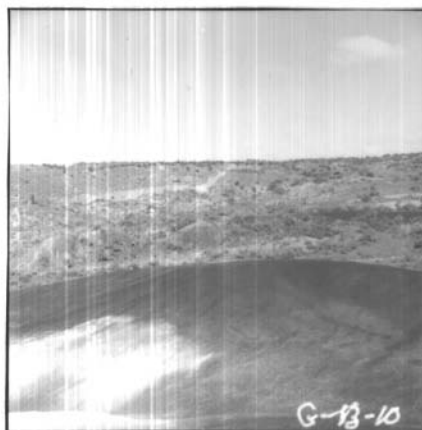
G-13-12 Two of the remaining adobe buildings left in Clarkeville.

No reclamation is needed. The subsidence area is in very rough area, and the holes are no worse than the deep narrow arroyos.

H. B. Nickelson



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