

## MEMORANDUM

TO: Steve Frost, Coal Geologist, NMBMMR

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

SUBJECT: Reclamation evaluation for OSM, Gallup Field, Biava Mine No. 3

\* Biava No. 3 mine 2400' NL, 400' EL, 10-15-18 Loc. 10

The information available on the Biava No. 3 mine is rather scant considering it was in operation in 1957 according to state mine inspector's reports. The mine was started after the Biava No. 2 mine was flooded from the east workings of what is believed to be the old Sunshine mine and the coal on the west side of Rocky Cliff Canyon was depleted or became thin and uneconomical. The openings at locations 33 and 32 on the map may have been operated by Mr. Biava. These openings are vague but evidence in the field suggested that they are there.

The Biava No. 2 mine ceased operations in 1949. The state mine inspector's office reports that another mine due east of the Ceremonial Grounds was operated by Mr. Biava, location 30. Mr. John Eva is still living and resides on Aztec St. behind Ricco Motors, address P. O. Box 247, Gallup. If time permits I will talk to him. The other mines mentioned above will be taken up under Unknown Mines. The Biava No. 3 mine does have problems, and that will be discussed in this memo without confusing it with other mines.

The Biava No. 3 mine, location 10, was opened by two drifts on the coal bed, reportedly to recover pillars left in the Sunshine mine. The aircourse is to the right or to the east and the main entry is on the left. It was immediately noted by the examiners that the mine is on fire. Big sandstone boulders have sloughed down and made the area about the portal quite dangerous for people to crawl about. Both drifts are closed to access. On the rim rock above the drifts the ground is crossed with cracks, and coal smoke was noted coming from several places. The fire could be controlled

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by cleaning up the face of the rim rock along the fire areas and compacting material in front and on top of the rim rock to exclude air from feeding the fire. The fire is feeding on pillars. An evaluation of the feasibility of its control should be taken. The land is poor and not used. The fire over the years could spread over quite a distance as that particular rim rock extends back quite a distance and it will continue to break as the fire advances. The area affected by the fire at present is triangular in shape. The bearing of one side of the triangle is S.  $24^{\circ}$  E., 168'; another side of the triangle bears S.  $47^{\circ}$  W., 204'; and the rim over the portal forms the third side of the triangle. At present the area seems relatively small. I would say the fire should be controlled.

Photos taken on the mine site are as follows:

G-3-8 View looking N.  $42^{\circ}$  W. at the collapsed aircourse showing the effect of the fire on the rim sandstone.

G-3-9 Another view of the aircourse, looking east. Steam can be seen at the end of the range pole. The rock temperature at the vent is about  $90^{\circ}$  to  $100^{\circ}$  F.

G-3-10 The photo shows the main adit that bears N.  $15^{\circ}$  E.

G-3-11 This is a view looking N.,  $60^{\circ}$  W. on the top of the rim. The smoke from the mine fire is evident, and the heat has killed juniper trees and other vegetation over the area.

G-3-12 This is a view looking S.  $25^{\circ}$  W. from on top of the rim above the main portal, showing the tram road to the dump and coal bins that are now in ruin. Recent rains have kept the pond that was formed by the tram about full. Mr. Biava's home which he rents is to the west of the tram road. Note the tram road to the dump is at a right angle to this road; this leads to the portal of a slope at the base of the rim slope. This could have been Biava's No. 2 mine.

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G-4-3 View of the Biava dump looking to the north. Note the tram to the left in the photo which goes to location 33. The area of the dump could stand some housecleaning.

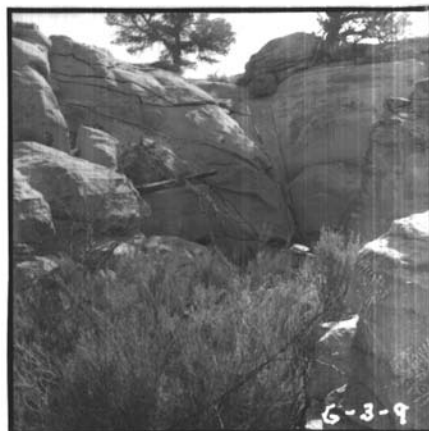
\* It is recommended that the fire be controlled and the dump area be policed of its junk and debris.

*H. B. Nickelson*

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G-3-8



G-3-9



G-3-10



G-3-11



G-3-12



G-4-3