

February 8, 1948; Sun Excelsior Mine, Excelsior, Ark.; 8 Killed

(From Bureau of Mines report, by R. D. Bradford, A. A. Sinicrope, M. T. Fuller, and B. L. Curry)

Near 3:30 p.m. the night foreman and two men were in a trip of cars being lowered down the slope. When they were about 300 feet from the portal, the explosion threw them around in the cars. The hoist engineer stopped the trip because the force of the explosion closed the signal circuit. Following a short reversal of air flow, the ventilation resumed a normal course down the slope, and 1 man went outside to summon aid while the other 2 continued down the slope on foot. They advanced slowly, pausing occasionally to patch up damaged stoppings, and reached 6 west overcast where the intake air was short-circuited, and the contaminated atmosphere prevented further progress. Three concrete-block stoppings were demolished.

A rescue party arrived a short time later, without gas masks or breathing apparatus, so advance was made by erecting brattice-cloth stoppings. The bodies of 8 men were found and recovered by 8:30 p.m. These were the only men underground besides the three men on the slope at the time of the explosion.

The explosion was violent for 2,000 feet from the face of the slope and was especially destructive from the face to the junction at 7 east. Flame traversed the 8 west section, the 7 west return airway, and the 8 east spout hole, also about 200 feet of 7 east and the main slope to between 6 and 7 west. Heaving action of the floor at 8 west sidetrack probably released methane into an area that was poorly ventilated. Ignition may have been due either to an arc from a nipping station, an arc from the wiring or motor of a blower fan, or by smoking, which was a common practice. No preshift or onshift examinations for gas were made on the day of the explosion. Coal dust entered into the explosion, but water on the slope and in 7 east and rock dust applied several months before as far as 7 west helped to limit the propagation (fig. 156).

