

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Health and Safety District A

REPORT OF FATAL COAL MINE RIB-FALL ACCIDENT
CLYDE MINE)
REPUBLIC STEEL CORPORATION
NORTHERN COAL MINES DISTRICT
FREDERICKTOWN, WASHINGTON COUNTY, PENNSYLVANIA

Injured: March 17, 1967
Died: March 19, 1967

by

Gerald D. Young
Federal Coal Mine Inspector

Originating Office - Bureau of Mines
4800 Forbes Avenue, Pittsburgh, Pa. 15213
W. Dan Walker, Jr., District Manager
Health and Safety District A

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INTRODUCTION

This report is based on an investigation made in accordance with provisions of the Federal Coal Mine Safety Act (66 Stat. 692; 30 U.S.C. Secs. 451-483) as amended.

George Ozanick, timberman, was seriously injured about 9 a.m., Friday, March 17, 1967, by a rib fall that occurred about 12 feet outby the face in a pillar pocket off "00" entry 3 butt left 15 face section of the Clyde mine.

Ozanick died at 9:45 p.m., March 19, 1967, in the Greene County Memorial Hospital, Waynesburg, Pennsylvania, as a result of the injuries. Ozanick, age 40, had 20 years mining experience and had been employed as a timberman for the last 5 months. He is survived by his widow and four dependent children under the age of 18.

The Waynesburg office of the Bureau of Mines was notified of the accident at 8:30 a.m., March 20, 1967, by Steve Radovich, mine foreman. An investigation was made the same day.

An examination of the pillar pocket where the accident occurred could not be made because a short time after the accident the place caved to the extent that it was inaccessible. Information for this report was obtained by a visit to the area outby and adjacent to the scene of the occurrence and from statements made by Radovich; Albin Cromika, continuous-miner operator; and James Kennedy, loading-machine operator. Radovich, Cromika, and Kennedy were in the place when the accident occurred; however, they were not eyewitnesses.

GENERAL INFORMATION

The mine openings consist of 5 shafts and 2 drifts. Operations are in the Pittsburgh coalbed, which averages 74 inches in thickness in this area. Employment was provided for 331 persons, of whom 266 worked underground and 65 on the surface, on 3 shifts a day, 5 days a week. The average daily production was 4,500 tons of coal, loaded by continuous-mining machines into shuttle cars.

A block system of mining was practiced and pillars were extracted by a pocket-and-wing method. Entries, crosscuts, and pillar splits were driven 16 feet in width. The 3 butt left 15 face section had been developed by six to eight entries on 108-foot centers. During the development of the entries and crosscuts, approximately 12 inches of the draw rock was mined with the coal. Roof bolts were installed in full compliance with recommendations of the Bureau's roof-control representative; however, roof bolts were not used as a means of roof support during pillar recovery. A systematic method of timbering had been adopted for use in pillar recovery and was followed in all places visited during this investigation. Crossbars were required to be set on 4-foot centers to within 16 feet of the faces. Breaker posts were required in openings to the gob during pillar extraction. In modified open-end recovery, the small fender is cut through at intervals to the gob leaving small stumps of coal. Not less than three posts were required in the gob cut-throughs. Crossbars were fanned when turning a place off the main entries.

Officials and employees were familiar with the proper methods of testing and examining the roof, face, and ribs, and it was reported that these examinations had been made before the accident occurred.

The investigation by a representative of the Pennsylvania Department of Mines and Mineral Industries was made Friday, March 17, 1967, the day of the accident.

The investigation made March 20, 1967, consisted of the following committee members:

Republic Steel Corporation
Northern Coal Mines District

Ed Filer
Steve Radovich

Safety Director
Mine Foreman

United States Bureau of Mines

Gerald D. Young

Federal Coal Mine Inspector

C. C. Virgin, superintendent of industrial relations; A. M. Shaffer, assistant superintendent of industrial relations; J. W. Connor, superintendent; F. A. O'Brochta, State mine inspector (chairman of meeting); W. L. Groves, State mine inspector; Carl Bailey, safety committeeman; Allen Hagar, safety committeeman; and Peter Sabo, acting safety committeeman, attended a meeting of the investigating committee held on the surface March 20, 1967.

The last Federal inspection of this mine was completed March 3, 1967.

DESCRIPTION OF ACCIDENT

Ozanick, timberman, was a member of the crew that left the portal at approximately 8:10 a.m. on Friday, March 17, 1967, and arrived on the working section about 10 minutes later. The crew began work in a pillar pocket driven in a 100-foot-wide barrier block of coal between "00" entry 3 butt left and the gob area of 1 butt 15 face section. The pocket had been started on the preceding shift (see sketch).

John Domen, assistant mine foreman, examined the roof and ribs in the working place and instructed the workmen to scale the roof and ribs and then to load out the material scaled down to make sufficient space to install a crossbar. Because of added height of the place, due to falls of roof that occurred while mining on the previous shift, it was necessary to climb on top of the continuous miner to scale the roof and ribs. After scaling the roof and ribs while standing on the continuous miner, Cromika tested the roof and ribs with a steel bar. He stated that in his opinion the place was in a safe condition. The miner was moved back from the face and the loose material on the mine floor was cleaned up in preparation to erecting the crossbar.

The crossbar was placed on roof jacks of the continuous miner and raised to the roof. A leg was set and well secured under the crossbar on the left side of the continuous miner. Cromika procured a measuring device and climbed on top of the continuous miner. Ozanick was in a stooped position on the right side of the continuous miner cleaning fine material on the floor for a place to set the leg under the crossbar. Radovich visited the working place and observed the men working in preparation for setting the leg under the crossbar. He stated, that in his opinion, the roof was firm and the ribs were reasonably straight with no overhanging brows.

Radovich was leaving the place and had gone about 10 feet when he heard a noise. Turning around, he saw Ozanick pinned against the leg of the outby crossbar by a piece of rock that fell from the rib. The fallen material was removed from Ozanick and first aid was given. He was transported to the surface and immediately taken to the Greene County Memorial Hospital, Waynesburg, Pennsylvania, where he died at 9:45 p.m., March 19, 1967.

Cromika received minor injuries when struck on the back by the crossbar which was partly dislodged by the piece of rock that fell from the rib. The fallen rock was about 33 inches in length, 32 inches in width, and 12 inches in thickness and was slickensided and tapered where it had been embedded in the rib. It fell from a height of about 9 feet from the floor and 12 feet outby the face. The working place was 16 feet wide and 10 feet 4 inches high.

During the investigation it was evident that extraordinary stresses were present on the roof and ribs of the surrounding area. Considerable crushing and spalling of the ribs were observed. The abandoned gob area of 1 butt was in close proximity to the pillar block of coal being mined thereby having some effect on the extraordinary stresses of the area.

CAUSE OF ACCIDENT

Since the supervisors and workmen stated that examinations and tests of the roof and ribs were made and all loose roof and rib material was taken down in the working place, it is believed the accident was caused by extraordinary stresses on the fragile roof and ribs "pinching off" the slicksided material without warning.

RECOMMENDATION

Compliance with the following recommendation may prevent accidents of a similar nature:

1. More careful and thorough evaluations of the rib conditions should be made in working places near abandoned gobs where excessive stresses are present, particularly in places where fragile roof material has fallen, thereby, adding height to the ribs.

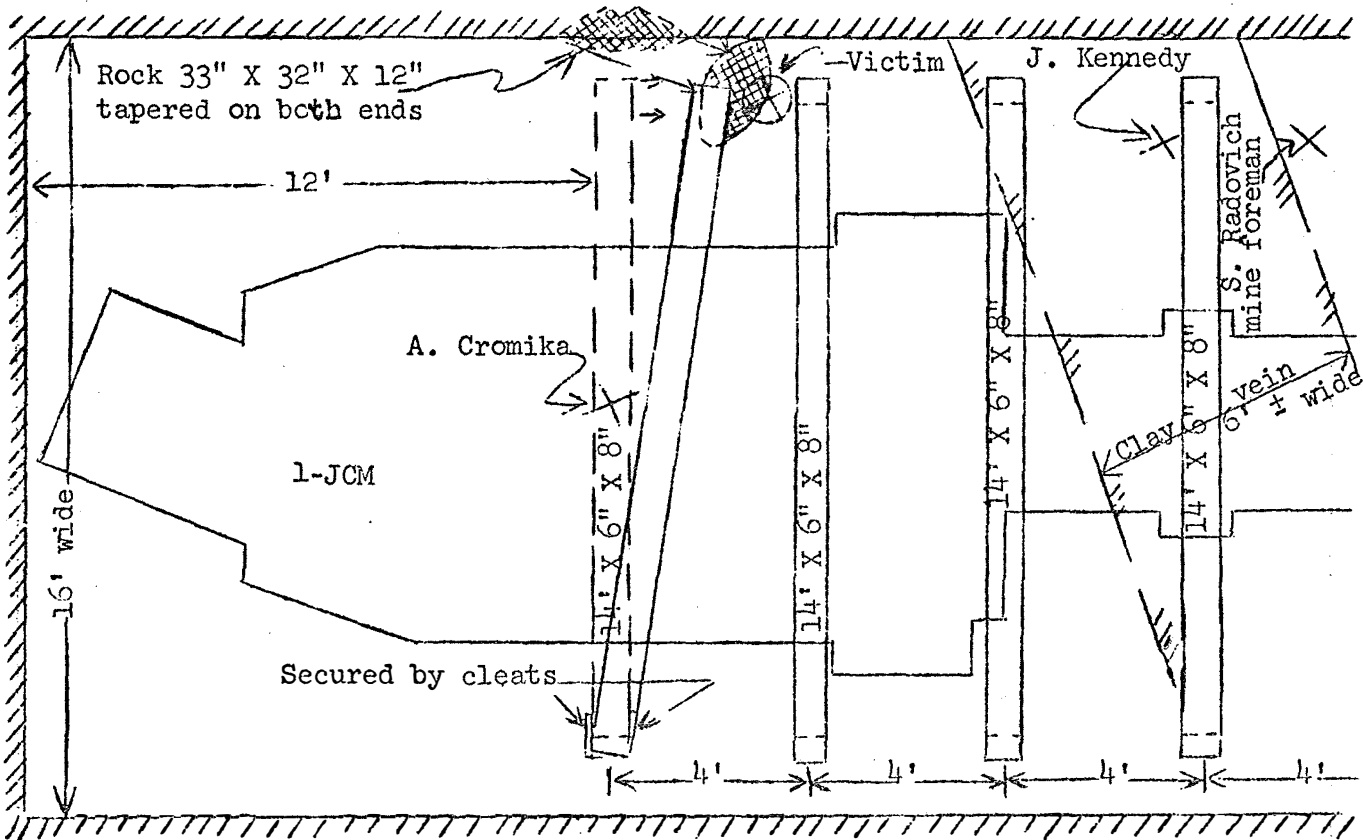
ACKNOWLEDGMENT

The cooperation of the company officials and employees, inspectors of the Pennsylvania Department of Mines and Mineral Industries, and members of the United Mine Workers of America during this investigation is gratefully acknowledged.

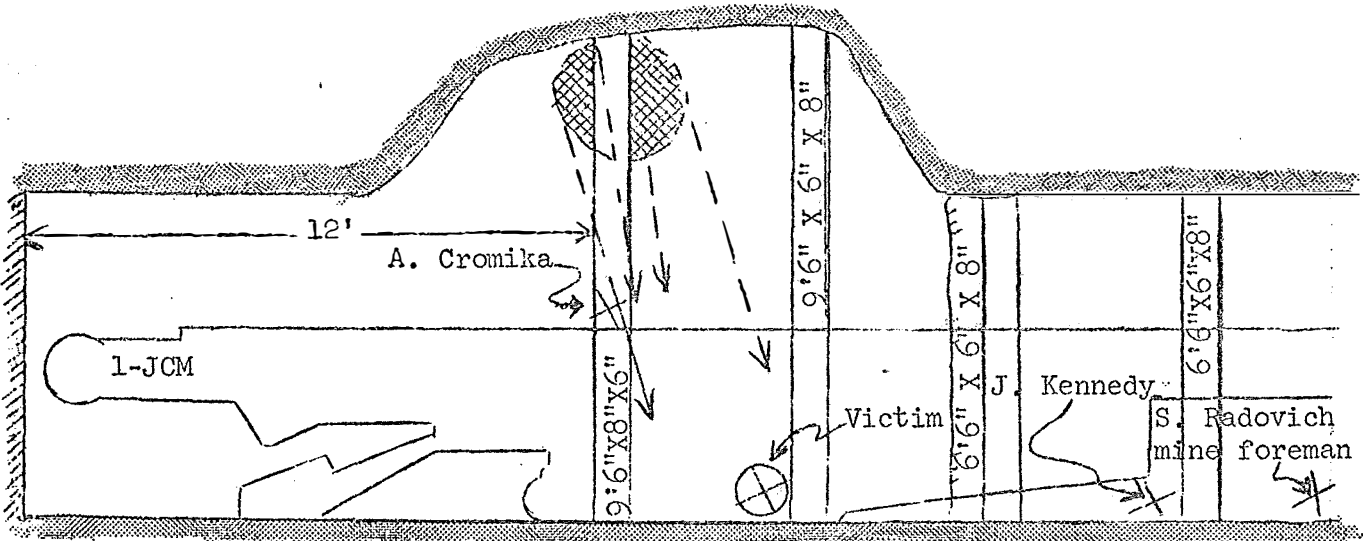
Respectfully submitted,

/s/ Gerald D. Young

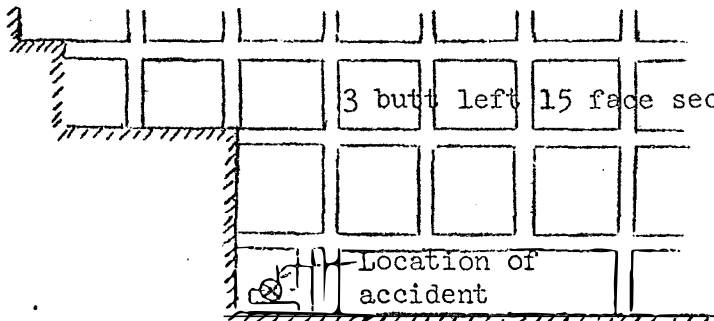
Gerald D. Young



Plan - Scale 1" = 4'



Profile - Scale 1" = 4'



Mined out - 1 butt
Location - Scale 1" = 200'

Sketch of Scene of Fatal Coal Mine
Rib-Fall Accident
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Republic Steel Corporation
Northern Coal Mines District
Fredericktown, Washington County,
Pennsylvania
Injured - March 17, 1967 - Died
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