

ID# 4401642

77-0182

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
MINING ENFORCEMENT AND SAFETY ADMINISTRATION

District 5

**COAL FATAL**

REPORT OF UNDERGROUND COAL MINE INVESTIGATION

FATAL COAL MINE BUMP ACCIDENT

Moss No. 3 Mine, Portal 'A' (I.D. 44-01642)  
Clinchfield Coal Company  
Duty, Dickenson County, Virginia

November 4, 1977

by

E. C. Rines  
Coal Mine Inspection Supervisor

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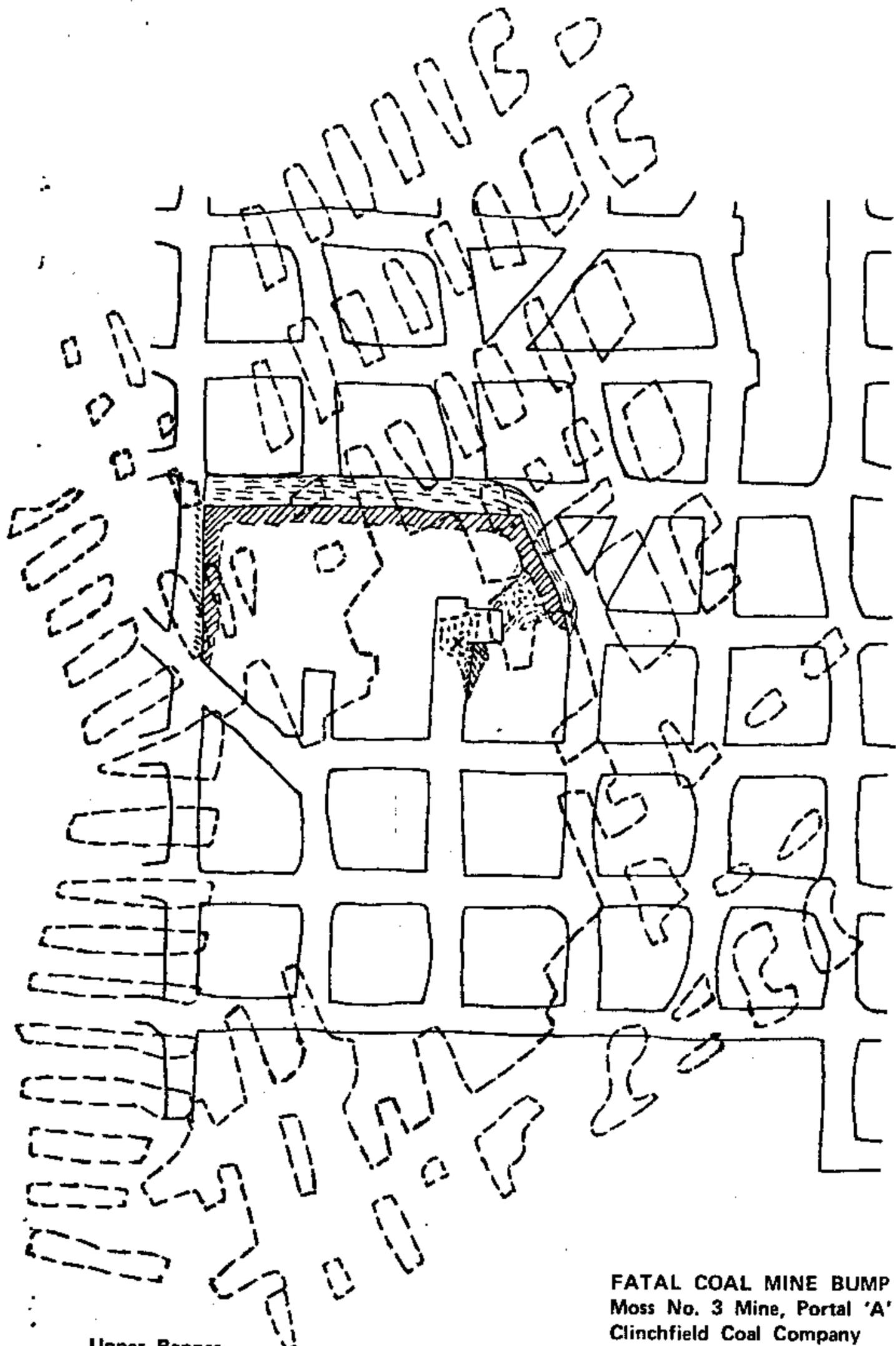
Originating Office - Mining Enforcement and Safety Administration  
P. O. Box 560 - 546 Alexandria Avenue, Norton, Virginia 24273  
W. R. Compton, District Manager

**REPORT OF UNDERGROUND COAL MINE INVESTIGATION**

**FATAL COAL MINE BUMP ACCIDENT**

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Shaded area shows extent of coal bump

Barrier pillar where bump occurred

Thick Tiller coalbed

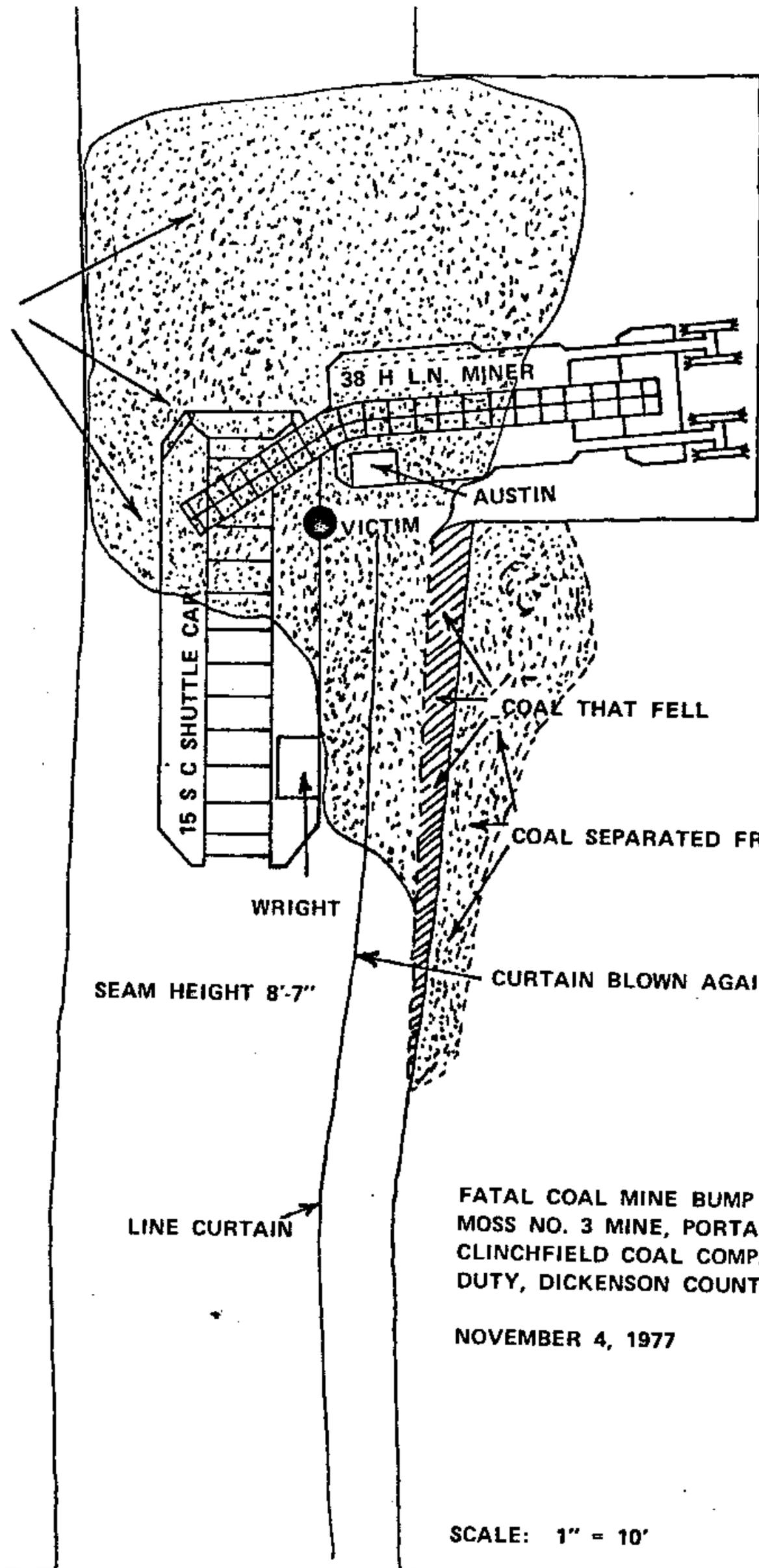
Upper Banner coalbed

**FATAL COAL MINE BUMP ACCIDENT**  
 Moss No. 3 Mine, Portal 'A'  
 Clinchfield Coal Company  
 Duty, Dickenson County, Virginia

November 4, 1977

SCALE: 1" = 100'

LOOSE COAL



38 H L.N. MINER

AUSTIN

VICTIM

15 S C SHUTTLE CAR

COAL THAT FELL

COAL SEPARATED FROM ROOF

WRIGHT

SEAM HEIGHT 8'-7"

CURTAIN BLOWN AGAINST SHUTTLE CAR

LINE CURTAIN

FATAL COAL MINE BUMP ACCIDENT  
MOSS NO. 3 MINE, PORTAL 'A'  
CLINCHFIELD COAL COMPANY  
DUTY, DICKENSON COUNTY, VIRGINIA

NOVEMBER 4, 1977

SCALE: 1" = 10'

### Abstract of Investigation

<p><b>Title of Investigation:</b> Report of Underground Coal Mine Investigation (Fatal Coal Mine Bump Accident)</p> <p><b>Report Date:</b> December 21, 1977</p> <p><b>Mine:</b> Moss No. 3, Portal 'A'</p> <p><b>Mine I.D. Number:</b> 44-01642</p> <p><b>Company:</b> Clinchfield Coal Company</p> <p><b>Town, County, State:</b> Duty, Dickenson County, Va.</p> <p><b>Author(s):</b> E. C. Rines</p>	<p style="text-align: center;"><b>Mine Information</b></p> <p>Daily Production <u>1,650 tons</u></p> <p>Surface Employment <u>19</u></p> <p>Underground Employment <u>151</u></p> <p>Thickness of Coalbed <u>10 feet</u></p>
<p><b>Originating Office - Mining Enforcement and Safety Administration Coal Mine Health and Safety District <u>5</u>.</b></p> <p><b>Address:</b> Norton, Virginia 24273</p>	<p>Last Quarter Injury Frequency Rate (HSAC) for:</p> <p>Industry 41.43</p> <p>This Operation 16.18</p> <p>Training Program Approved <b>Yes</b></p> <p><b>Authority</b> - This report is based on an investigation made pursuant to the Federal Coal Mine Health and Safety Act of 1969 (83 Stat. 742).</p>

#### Abstract

On Friday, November 4, 1977, at approximately 1:15 p.m., a coal outburst occurred in the No. 2 room entry crosscut right of the 10 right section off 'A' mains in the Clinchfield Coal Company's Moss No. 3 Mine, Portal 'A', which resulted in the death of Emory Powers, continuous mining machine helper, and inflicted minor injuries to Raymond Wright, shuttle car operator. Powers, age 50, had 31 years of mining experience all with this company, the last 2½ months at this occupation. Wright, age 51, had 33 years mining experience, all with this company, the last 12 months as a shuttle car operator. The accident occurred while mining was being performed in a barrier pillar at the entrance of the 10 right section.

Information for this report was compiled through a MESA Investigation that was started November 4, 1977.

Company Officials	<u>Name</u>	<u>Address</u>
Vice-President	C. M. Bailes	Dante, Virginia 24237
Superintendent	Strickler Mullins	Dante, Virginia 24237
Safety Director	M. L. West	Dante, Virginia 24237
Principle Officer - H&S	Strickler Mullins	Dante, Virginia 24237
Labor Organization	United Mine Workers of America	
Chairman - H&S Committee	McNeil Phillips	St. Paul, Virginia 24283

### Commentary

On Friday, November 4, 1977, the 10 right section crew under the supervision of Carroll Baker, entered the mine about 8 a.m., and arrived on the section at approximately 8:20 a.m. Baker after examining the working places instructed the crew to begin mining operations. Production progressed normally until about 1:15 p.m., when suddenly an outburst of coal occurred in the No. 2 room entry where mining operations were in progress. Roy Austin, continuous miner operator, who was trapped in the cab of the machine by loose coal, deenergized the machine and called for help. Raymond Wright, shuttle car operator, had positioned the shuttle car under the boom of the mining machine when the bump occurred. Wright freed himself, then went for help. Nearby employees soon arrived and recovery operations began. Austin was freed from the cab of the continuous mining machine and Powers, victim, was found on the mine floor next to the shuttle car under about 2 feet of loose coal. He displayed no vital signs and was placed on a stretcher and transported to the surface to an awaiting ambulance.

### Discussion and Evaluation

The investigation revealed the following factors relevant to the occurrence of the accident:

1. A coal outburst occurred in the 10 right section.
2. One employee was fatally injured and one employee received minor injuries. There was no property damage.
3. The coal outburst occurred while second mining was being performed in a barrier pillar (380 feet in length and 140 feet wide).
4. Mining was taking place in the first cut of the No. 2 room entry crosscut right. (See Map.)
5. Immediately prior to the coal outburst the continuous mining machine had been positioned to load the last shuttle car of coal.
6. The coal outburst disrupted face ventilation, generated a large amount of dust, and scattered approximately 2-foot of loose coal over the mine floor and mining equipment.

7. The section foreman and employees when interviewed stated that they had not observed any unusual conditions prior to the outburst.
8. The mine has no history of coal outbursts.
9. The overburden included the Upper Banner coalbed which had been second-mined.
10. The immediate and main roof was a mixture of hard shale and sandstone.
11. The continuous mining machine was equipped with a canopy that afforded lateral protection which prevented injuries to the continuous miner operator.
12. The shuttle cars were equipped with a canopy; however, they were not afforded lateral protection. The canopy protected the shuttle car operator from receiving serious body injuries.
13. Powers was standing beside the shuttle car attending the miner cable when the outburst occurred.
14. The average height of the Thick Tiller coalbed in this area was 10-foot.
15. The Moss No. 3 Mine, Portal 'A' was started in 1958.

#### Finding of Fact

Evidence and findings of the investigation indicated that there were no violations of 30 CFR which would contribute to the occurrence of the accident.

#### Conclusion

The cause of this occurrence and resultant fatality was a cumulative process from a combination of factors that altered abutment pressures causing an imposition of a shock or impact load upon stressed pillars situated within a high stress abutment zone. Other factors include: natural conditions conducive to bumps; mining in the thick Tiller coalbed passed under isolated pillars which were left in the overlying Upper Banner coalbed (See Overlay). Movement of converging abutment loads plus additive effects of weight transmission from unmined pillars in the overlying coalbed resulted in creation of dynamic energy, which when applied to a high-stress zone gave reason for the shock burst.

Respectfully submitted,

/s/ E. C. Rines

E. C. Rines

## APPENDIX

The investigation was conducted by the Mining Enforcement and Safety Administration and the following persons furnished information or were present during the investigation:

### The Pittston Company

J. W. Crawford	Coal Group Director of Safety
J. L. Gilley	Consultant

### Clinchfield Coal Company

C. M. Bailes	Vice President
Henry Kiser	General Mine Manager
W. B. Couch	Manager of Mines
M. L. West	Manager of Safety
Strickler Mullins	Superintendent
Carrol Baker	Section Foreman
Reed Ball	Section Foreman
Danny Cromel	Safety Inspector

### Clinchfield Coal Company Employees

Raymond Wright	Shuttle Car Operator
Roy Austin	Continuous Miner Operator
Joe Short	Roof Bolter Operator

### Representatives of Miners

Harold Hartsock	International Safety Inspector
Floyd Mullins	District 28 Safety Coordinator
Jack Quesenberry	President, Local Union No. 1256
McNeil Phillips	Chairman of Safety Committee

### Virginia Division of Mines and Quarries

Fred H. Carty	District Inspector (Roof Control)
Clyde Breeding	District Inspector

Mining Enforcement and Safety Administration

**Sylvester Gaspersich**

**Merian O'Bryan**

**E. C. Rines**

**W. J. Taylor**

**Mining Engineer, Division of Safety  
Arlington, Virginia**

**Supervisory Coal Mine Technical Specialist  
(Accident Prevention and Investigation)**

**Coal Mine Inspection Supervisor**

**Federal Coal Mine Inspector**

DATA SHEET

Victim Data

Name Raymond Wright Sex Male SSN 225-30-6810

Age 51 Job Classification Shuttle Car Operator Experience at this Classification 12 months

Total Mining Experience 33 years What activity was being performed at time of accident? Operating shuttle car while under boom of miner Victim's experience at this activity 12 months Was victim trained in this task? Yes

Health and Safety Courses/Training Received (Related to Accident)

Date Received

First Aid and Accident Prevention

2/23/77

Supervisor Data (Supervisor of Victim)

Name Carroll Baker Certified: Yes  No

Experience as Supervisor 8 years Total Mining Experience 28 years

Health and Safety Courses/Training Received

Date Received

Roof and Rib Control; Accident Prevention; Health & Safety; First Aid

10/1/76

When was the supervisor last present at accident scene prior to the accident? 1:05 p.m., 10 minutes

What did he do when he was there? Check roof, ribs, ventilation and methane.

When was he last in contact with the victim? 1:05 p.m. Did he issued instructions relative to the accident? No

Was he aware of or did he express an awareness of any unsafe practice or condition? No

Was he involved in any activity other than supervision? No

DATA SHEET

Victim Data

Name Emory R. Powers Sex Male SSN 229-26-0030

Age 50 Job Classification Miner Helper Experience at this Classification 2½ months

Total Mining Experience 31 years What activity was being performed at time of accident? Miner helper

Victim's experience at this activity 2½ months Was victim trained in this task? Yes

Health and Safety Courses/Training Received (Related to Accident)

Date Received

Roof & Rib Control; Accident Prevention, Safety; Health; First Aid; 9/13/76 - 11/21/75

Was scheduled for retraining but was sick.

Supervisor Data (Supervisor of Victim)

Name Carrol Baker Certified: Yes  No

Experience as Supervisor 8 years Total Mining Experience 28 years

Health and Safety Courses/Training Received

Date Received

Roof & Rib Control; Accident Prevention; Health & Safety; First Aid 10/1/76

When was the supervisor last present at accident scene prior to the accident? 1:05 p.m. - 10 minutes

What did he do when he was there? Checked roof, ribs, ventilation and methane

When was he last in contact with the victim? 1:05 p.m. Did he issued instructions relative to the accident? No

Was he aware of or did he express an awareness of any unsafe practice or condition? No

Was he involved in any activity other than supervision? No