

NATIONAL MINE HEALTH & SAFETY ACADEMY  
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UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

District 8

REPORT OF INVESTIGATION  
(UNDERGROUND COAL MINE)

MULTIPLE FATAL ROOF FALL ACCIDENT

Orient No. 6 (ID No. 11-00599)  
Freeman United Coal Mining Company  
Waltonville, Jefferson County, Illinois

July 9, 1986

by

Roger W. Uhazie, Jr.  
Supervisory Coal Mine Safety and Health Inspector

W. Roger Schmidt  
Hydrologist

David N. Wolfe  
Coal Mine Safety and Health Inspector

Originating Office - Mine Safety and Health Administration  
4015 Wilson Boulevard, Arlington, Virginia 22203  
Jerry L. Spicer, Administrator for Coal Mine Safety and Health



**Authority**—This report is based on an investigation made pursuant to the Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164.

**Section A—Identification Data**

1. Title of investigation: Multiple Fatal Roof Fall	2. Date MSHA investigation started: July 9, 1986
3. Report release date: February 17, 1987	4. Mine: Orient No. 6
5. Mine ID number: 11-00599	6. Company: Freeman United Coal Mining Company
7. Town, County, State: Waltonville, Jefferson County, Illinois	8. Author(s): David N. Wolfe, Roger W. Uhazie, W. Roger Schmidt

**Section B—Mine Information**

9. Daily production: 5,000	10. Surface employment: 68
11. Underground employment: 368	12. Name of coalbed: Herrin No. 6
13. Thickness of coalbed: 88 Inches	

**Section C—Last Quarter Injury Frequency Rate (HSAC) for:**

14. Industry: 6.92	15. This operation: 4.87
16. Training program approved: October 6, 1980	17. Mine Profile Rating: 62

**Section D—Originating Office**

18. Mine Safety and Health Administration Coal Mine Health and Safety District No. :	Office of the Administrator, CMS&H	Address: 4015 Wilson Boulevard Arlington, Virginia 22203
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**Section E—Abstract**

At about 11:10 a.m., Wednesday, July 9, 1986, a multiple fatal roof fall accident occurred in the 2nd Main East travel entry of the Orient No. 6 Mine, Freeman United Coal Mining Company. Three foremen were standing in the entry observing a continuous mining machine cutting down roof for an overcast when the roof suddenly collapsed, covering the foremen, resulting in their death. The names of the victims, their ages, and years of experience, are listed in Appendix A.

The vibration created by the continuous mining machine cutting down roof and roof support materials caused the roof to be disturbed. The accident occurred because supplemental roof supports were not installed across the openings of the travelway prior to initiating cutting operations.

**Section F—Mine Organization**

Company officials:	Name	Address
19. Vice President UG Operations	David A. Beerbower	P.O. Box 100 West Frankfort, Illinois 62896
20. Superintendent:	Ernie Fletcher	P.O. Box 308 Waltonville, Illinois 62894
21. Safety Director	Rodney G. Allen	P.O. Box 100 West Frankfort, Illinois 62896
22. Principle officer—H&S:	James R. Hess	P.O. Box 308 Waltonville, Illinois 62894
23. Labor Organization:	United Mine Workers of America	900 Fifteenth Street, N.W. Washington, D.C. 20005
24. Chairman—H&S Committee:	Roger McGovern	535 South 24th Street Mt. Vernon, Illinois 62864

shuttle  
car



Scale  
1 inch = 20 feet

4160 volt cable

40' by 5'6" cut for overcast

shuttle  
car

continuous  
mining  
machine

curtain

roof fall  
area: 34'  
by 16'7"

Kenneth Hartford ⊗ Bobby Perry, Sr.

⊗ Bobby Perry, Jr.

stopping

belt  
entry

Orient No. 6 Mine  
(ID No. 11-00599)  
Freeman United Coal Mining Company  
Waltonville, Jefferson County, Illinois  
July 9, 1986

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## GENERAL INFORMATION

The Orient No. 6 mine is located near Waltonville, Jefferson County, Illinois. The mine was opened and is operated by Freeman United Coal Mining Company. Freeman United Coal Mining Company is a division of Material Service Corporation, which is a subsidiary of the General Dynamics Corporation of St. Louis, Missouri. The principal corporate officials of the Freeman United Coal Mining Company at the time of the accident were:

### Freeman United Coal Mining Company

David A. Beerbower

Vice President, Underground  
Operations

Rodney G. Allen

Safety Director

### ORIENT NO. 6 MINE

Ernie Fletcher

Superintendent

James R. Hess

Mine Manager

The Orient No. 6 mine was opened into the Herrin No. 6 coal seam in October of 1968, with a maximum overburden of 810 feet. The mine is opened to the surface by 4 air and production shafts. The average thickness of the coal seam is 88 inches, with an immediate roof of 20 feet of laminated gray shale and a main roof of 10 feet of limestone. The bottom consists of 3 feet of fire clay and 7 feet of shale. The entry widths in the mine are 14 to 18 feet wide with crosscut centers at 50 to 74 feet. Coal is produced on 3 shifts daily, 5 days a week, by 8 production units, 5 of which are advancing while 3 others are retreat mining. The method used to produce the coal is by room and pillar technique utilizing continuous-mining machines with shuttle car haulage. The coal is transported to the No. 1 shaft bottom by belt conveyor and removed from the mine by skips. The coal is cleaned at the preparation plant located at the No. 1 portal and transported from the mine site by railroad cars. Production in 1985, when 521 miners were employed, was 1,291,240 tons. The total number of miners employed in 1986 is 336, with a daily production of 5,000 tons.

The last Safety and Health inspection of the entire mine was completed on May 1, 1986. The accident occurred during an ongoing Safety and Health inspection, which started on May 20, 1986. The mine is in a 103(i) 10-day spot inspection status due to methane liberation. The date of the last 103(i) inspection was on June 25, 1986.

## COMMENTARY

### EVENTS LEADING UP TO THE ACCIDENT

On Wednesday, July 9, 1986, the second week of the annual miners vacation, the crew for the 2nd Main East construction area, supervised by Bobby R. Perry, Sr. and Bobby R. Perry, Jr., entered the mine at the No. 1 portal and traveled to their assigned work area. Perry Sr. examined the work area and assigned duties to the various crew members. Perry Jr., who was in charge of the roof bolting machine operators, assigned duties to the two roof bolting machine operators working with the construction crew.

The continuous mining machine was located in the No. 113 crosscut between the Nos. 2 and 3 entries. The roof had been previously cut for approximately 40 feet in length in the crosscut and No. 3 entry and plans were to continue cutting across the entry for the purpose of constructing an overcast. Daniel Smith, Continuous Mining Machine Operator, and Willard House, Continuous Mining Machine Helper, serviced the continuous mining machine. Smith started to load out excess material that had previously been cut from the roof at the intersection of No. 113 crosscut and No. 3 entry. After completing the cleanup, Smith then repositioned the continuous mining machine and removed a partial cut from the roof in the No. 3 entry. The roof being removed measured approximately 11 feet wide, the width of the cutting head of the continuous mining machine, and approximately 5-1/2 feet in height. After completing the partial cut, Smith repositioned the continuous mining machine and cleaned material along the right rib to facilitate roof bolting in the brow.

At approximately 10:40 a.m., Peter Sheridan, Assistant to the Superintendent, Kenneth D. Hartford, Shift Mine Manager, and Mike Simpson, Section Foreman, joined Perry Sr. and Perry Jr. near the overcast area in the No. 3 entry. They were discussing the movement of equipment from different areas of the mine in preparation for resumption of normal mining operations at the end of the vacation period. Sheridan and Simpson left the area after several minutes, to check on the location of a particular mantrip. Hartford, Perry Sr. and Perry Jr. remained at that location to observe the cutting operations.

#### THE ACCIDENT

Smith finished cleaning along the right rib, at which time Hartford instructed him to cut an additional foot of material from the roof towards a high voltage cable that was installed along the north side of the No. 3 entry. The continuous mining machine was started and the additional roof material was cut down. One of the three foremen flagged Smith to stop. Smith left the head of the continuous mining machine in the raised position and shut off the cutting bits. While waiting for the dust to clear, Smith suddenly saw the roof in the No. 3 entry starting to fall as the three foremen turned and attempted to retreat outby in the No. 3 entry. House, who was alongside the continuous mining machine, observed part of the brow starting to fall and immediately ran out of the crosscut. Smith deenergized the mining machine and shouted that the place had fallen. He ran from the area as part of the brow came to rest on the canopy of the continuous mining machine.

#### THE RECOVERY

Clarence White, Shuttle Car Operator, had positioned the shuttle car near the boom of the continuous mining machine prior to the fall. He heard Smith shout as he passed his location and retreated out of the crosscut along with Smith and House. Jim Wright and David Webb, Roof Bolting Machine Operators, heard the fall and proceeded to join the others. The miners traveled to the inby side of the fall and shouted for the foremen. Getting no response, they traveled over to the belt entry and then to the outby side of the fall. They called again and received no response. At this time they observed part of one of the victims clothing underneath the fallen material and determined the foremen were underneath the fall. Smith and House went to the telephone to report the accident and White, Wright and Webb started to gather material to

support the edge of the fall area. After being informed of the accident, Simpson returned to the area and issued instructions to start recovering the victims.

Ernie Fletcher, Mine Superintendent, was on the surface when he was informed of the accident. He instructed personnel to notify the proper authorities and issued orders for supplies to be sent to the area. He traveled on the surface to the No. 2 portal, and went underground to the accident scene. When he arrived at the scene, he assumed control of the recovery. Enough material had been removed so that the body of Perry Jr. could be recovered. Perry Jr. was placed on an ambulance and transported to the surface at approximately 12:20 p.m. Recovery operations continued with the body of Perry Sr. being recovered at approximately 1:00 p.m. and the body of Hartford being recovered at approximately 2:15 p.m. As the bodies of the 3 victims arrived on the surface, they were transported to the Good Samaritan Hospital at Mt. Vernon, Illinois.

#### ACTIVITIES OF MSHA PERSONNEL

At 12:15 p.m., July 9, 1986, Mike Sakovich, Acting Subdistrict Manager, Benton Subdistrict Office, was notified of the accident by David Beerbower, Vice President Underground Operations. Steve Kattenbraker, Supervisory Mining Engineer, William Mitchell, Coal Mine Inspector (Roof Control), Robert Montgomery, Coal Mine Inspector, and the District office in Vincennes, Indiana were contacted. Sakovich, Kattenbraker, Mitchell, and Montgomery arrived at the mine at 1:00 p.m., proceeded underground, and assisted in the recovery operations. A 103(k) Order was issued by Montgomery to prohibit the area from being disturbed and after preliminary information was gathered, arrangements were made to begin the investigation into the cause of the accident at 9:00 a.m., Thursday, July 10, 1986.

#### INVESTIGATION

MSHA participants organized an investigation team and assembled at the mine site on July 10, 1986. The investigation was conducted jointly with the Illinois Department of Mines and Minerals, employees of Freeman United Coal Mining Company, and with officials of the United Mine Workers of America. A list of persons who participated in the investigation is in Appendix B.

The underground investigation was started on July 10, 1986. Visual examinations were made of the fallen roof material, the proposed overcast site, roof bolts, roof bolting machine, continuous mining machine, and the roof conditions in the immediate area. Persons having knowledge of the conditions prior to and details of the accident or recovery operations were interviewed by a representative of MSHA on July 11, 1986. The names of those persons interviewed are in Appendix C. A tape recorder was used to record the statements of the persons interviewed and was used in the assembly of this report.

#### DISCUSSION AND EVALUATION

1. The mine was on a normal two week miner vacation. No coal was being produced during this period. The day shift crews working in the mine from

8:00 a.m. to 4:00 p.m. were rehabilitating some of the areas by spot bolting, general cleaning, and cutting roof for the construction of overcasts.

2. The 2nd Main East area of the mine was developed in May of 1982. This area consisted of 10 entries developed on 74-foot centers and connecting crosscuts driven on 74-foot centers. The roof was supported on a 5-foot by 5-foot pattern with 8-foot Keystone roof bolts, manufactured by Jenmar Corporation, utilizing a 6-inch by 16-inch bearing plate and expansion anchors manufactured by Ohio Brass. These entries had been driven in an easterly direction from the No. 1 portal for a distance of 120 crosscuts and left standing for approximately 3 years. The entries were eventually intersected in December of 1985 by entries developed west of the No. 2 portal. See Appendix E.

3. The overcasts being cut in the construction areas were for future development of the proposed 17 South section. A Joy, Model 12, continuous mining machine was used to cut the roof at the intersection of No. 3 entry at No. 112 crosscut for a belt overcast and the roof at the intersection of No. 3 entry at No. 113 crosscut for an intake escapeway overcast. High voltage cable conducting 4160 volts a.c. electrical current and telephone communication cable were installed along the right (north) rib of the No. 3 entry through the construction area. The roof for the proposed belt overcast was partially cut the day prior to the accident, however, it was decided to cut and complete the intake escapeway overcast because it would be needed first.

4. Several days prior to the accident, the mine roof was cut in the No. 112 crosscut between the Nos. 3 and 4 entries of 2nd Main East for a proposed belthead. Prior to the roof being cut at that location, Perry, Sr. ordered cribs installed in that general area because miners who were removing belt structure in the No. 4 entry indicated the roof may have been working and appeared questionable.

5. Hartford was hired on February 24, 1986 as a shift mine manager. He was acting mine manager during the vacation period for James Hess, who was on vacation. Perry Sr. and Perry Jr. were both hired as section foremen on June 23, 1986. These three supervisors were working during this period because none had accumulated enough time for personal vacation days. Perry Sr. was in charge of the 2nd Main East construction crew while Perry Jr. was in charge of the roof bolting crew.

6. Kenny Taylor, Preshift Examiner, conducted a preshift examination between 5:00 a.m. and 7:00 a.m. on the morning of the accident. He stated that he did not see any unusual or abnormal roof conditions in the No. 3 entry travelway where the accident occurred. Wright and Webb had passed through the area at the start of the shift on the day of the accident and did not notice any abnormalities. Sheridan and Simpson, who were standing in the area, having a discussion with Hartford, Perry Sr. and Perry Jr. approximately 10 to 15 minutes prior to the accident, stated that no one had expressed any concerns or problems regarding the roof.

7. The roof fall measured 34 feet in length, 16 feet in width, and from 2 feet high along both ribs to approximately 4 feet in the center of the entry. Statements by the witnesses indicated that the roof fell en-mass with little

or no warning. The area that fell was supported by a total of 23 roof bolts, 20 of which pulled out of the roof with the fallen material. One roof bolt broke and 2 remained in place while the material apparently fell around them. Some of the expansion anchor units recovered from the area indicated signs of deterioration. It was decided that a representative number of roof bolts, bearing plates, and expansion anchors would be recovered from the fall and tested by the Roof Control Division of MSHA's Bruceton Safety Technology Center.

8. The testing conducted by the Roof Control Division was in accordance with ASTM F432-83, Section 9. The tests revealed that the roof bolts, manufactured by Jenmar Corporation, and the bearing plates, manufacturer unknown, met the minimum ASTM standards. Tests were not conducted on the Ohio Brass expansion anchors because of the difficulty of simulating the condition that existed in the fall area. Visual observation of the anchor units indicated corrosion on the ends of the leaves of each shell. It was difficult to make an accurate determination concerning the effects of this corrosion, however, a diminished anchorage capacity could have been a possibility.

9. Supplemental roof supports had been installed inby and outby the accident area in the No. 3 entry of 2nd Main East after the mine had returned to normal operations. These supports consisted of Pattin 8-foot, double locked, resin point anchor roof bolts and Pattin Marion roof trusses. With the installation of the additional roof supports, it was decided to conduct comparison roof bolt pull tests adjacent to the accident area on roof bolts that were installed during initial development.

10. On September 10, 1986, representatives of mine management, UMWA, and MSHA's Technical Support Roof Control Division assembled at the Orient No. 6 mine to conduct the comparison testing. Pull tests were conducted on 3 roof bolts on the outby edge of the fall area, 3 roof bolts on the inby edge, and 1 roof bolt near the location where the continuous mining machine had stopped cutting immediately prior to the fall. Six of the tested roof bolts ultimately supported 14,000 pounds of applied load, at which time the test was stopped as the bolt yield was being reached. The one remaining roof bolt supported 13,000 pounds of applied load.

11. All three of the victims had worked at the Orient No. 6 mine less than six months. Hartford was employed as a shift mine manager at the Orient No. 6 mine on February 24, 1986. Previous to this, he was employed as an hourly employee, tipple attendant, coal sampler, roof bolter, miner operator, section foreman, mine manager, and underground superintendent, from September 1968 to November 1985 at various mines. Perry Sr. was employed as a section foreman at the Orient No. 6 mine on June 23, 1986. Previous to this, he was employed as a section foreman, general mine manager, and superintendent, from March 1969 to June 1986 at various mines. Perry Jr. was employed as a section foreman at the Orient No. 6 mine on June 23, 1986. Previous to this, he was employed as a general inside laborer, beltman, shuttle car operator, roof bolter, and section foreman, from September 1980 to June 1986 at various mines.

12. The Orient No. 6 mine has an MSHA approved training plan in accordance with 30 CFR Part 48 and Part 75. Included in the Part 75 training plan are provisions for addressing roof control training for certified persons.

Hartford was given training on the roof control plan on May 14, 1986. Perry Jr. and Perry Sr. were given training on the roof control plan on June 23 and June 25, 1986, respectively.

#### FINDINGS OF FACT

1. The roof being cut down for the overcast where the accident occurred was supported with 8-foot conventional roof bolts installed in 1982 when the area was developed.
2. During the cutting operations, the roof was being removed to a height of 5-1/2 feet and the roof bolts were being cut or pulled out by the cutting action of the ripper head on the continuous mining machine.
3. The tests conducted on the roof bolts and bearing plates and the comparison testing of the anchor units at the mine site by MSHA's Roof Control Division did not reveal any abnormalities of the roof support materials or anchorage capabilities.
4. On July 9, 1986, during the recovery operations, the following conditions were cited for violation of 30 CFR Part 75:
  - A. A 104(d)(2) Order for a violation of Section 75.202 because 2 roof bolts were knocked out and not replaced between the Nos. 113 and 114 crosscuts in the No. 2 entry of 2nd Main East and for 7 roof bolts that were knocked out and not replaced between the Nos. 112 and 115 crosscuts of the No. 3 entry of 2nd Main East.
  - B. A 104(a) Citation for a violation of Section 75.200 because 4 roof bolts at the Nos. 114 and 116 crosscuts in the No. 3 entry of 2nd Main East were spaced from 6 to 8 feet apart.
5. On July 10, 1986, a 107(a) Order of Withdrawal was issued for the roof not being adequately supported and therefore subsequently fell where the roof for an overcast was being cut at No. 113 crosscut in the No. 3 entry of 2nd Main East.

#### CONTRIBUTING VIOLATION

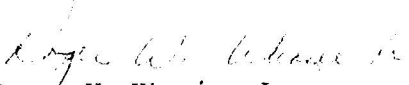
One of the conditions/practices in the findings contributed to the accident and constituted a violation of the provisions of 30 CFR Part 75. The roof was not adequately supported because supplemental roof supports were not installed across the No. 3 entry at No. 113 crosscut of 2nd Main East prior to the removal of the mine roof for a proposed overcast. This is a violation of 30 CFR 75.200. Copies of the citation and orders are in Appendix F.

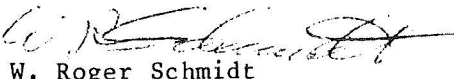
#### CONCLUSION

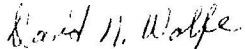
MSHA investigators concluded that the cutting action of the continuous mining machine removing the roof material and cutting or pulling the roof bolts from the mine roof caused the roof at the No. 113 crosscut of No. 3 entry of 2nd Main East to be adversely disturbed. A major contributing factor to the cause of the accident was the roof being inadequately supported, since management

failed to install supplemental roof supports across the openings of the No. 3 entry prior to initiating cutting operations for the proposed overcast.

Respectfully submitted,

  
Roger W. Uhazie, Jr.  
Supervisory CMS&H Inspector

  
W. Roger Schmidt  
Hydrologist

  
David N. Wolfe  
Coal Mine Safety and Health Inspector

Approved by:

  
Jerry L. Spicer  
Administrator  
for Coal Mine Safety and Health





## Section A—Victim Data

1. Name	2. Sex	3. Social Security Number
Kenneth D. Hartford	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	326-42-0170
4. Age	5. Job Classification	
37	Shift Mine Manager	
6. Experience at this Classification	7. Total Mining Experience	
11 Years	18 Years	
8. What activity was being performed at time of accident?	9. Victim's Experience at this Activity	10. Was victim trained in this task?
Observing a continuous mining machine cutting the mine roof for an overcast	11 Years	Yes

## Section B—Victim Data for Health and Safety Courses/Training Received (related to accident)

	Date Received
11. Roof Control Plan	02-24-86
12.	
13.	
14.	

## Section C—Supervisor Data (supervisor of victim)

15. Name	16. Certified
James R. Hess	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17. Experience as Supervisor	18. Total Mining Experience
9 Years	14 Years

## Section D—Supervisor Data for Health and Safety Courses/Training Received (related to accident)

	Date Received
19. Part 75	05-14-86
20.	
21.	
22.	
23. When was the supervisor last present at accident scene prior to the accident?	24. What did he do when he was there?
N/A Vacation	N/A

25. When was he last in contact with the victim?	26. Did he issue instructions relative to the accident?
N/A	N/A
27. Was he aware of or did he express an awareness of any unsafe practice or condition?	
N/A	





## Section A—Victim Data

1. Name	2. Sex	3. Social Security Number
Robert Ray Perry, Sr.	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	404-40-4185
4. Age	5. Job Classification	
52	Section Foreman	
6. Experience at this Classification	7. Total Mining Experience	
17 Years	34 Years	
8. What activity was being performed at time of accident?	9. Victim's Experience at this Activity	10. Was victim trained in this task?
Observing a continuous mining machine cutting the mine roof for an overcast	17 Years	Yes

## Section B—Victim Data for Health and Safety Courses/Training Received (related to accident)

	Date Received
11. Roof Control Plan	06-25-86
12.	
13.	
14.	

## Section C—Supervisor Data (supervisor of victim)

15. Name	16. Certified
Kenneth D. Hartford	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17. Experience as Supervisor	18. Total Mining Experience
11 Years	18 Years

## Section D—Supervisor Data for Health and Safety Courses/Training Received (related to accident)

	Date Received
19. Roof Control Plan	02-24-86
20.	
21.	
22.	

23. When was the supervisor last present at accident scene prior to the accident? Was present at the time of the accident.	24. What did he do when he was there? Supervised the cutting of the overcast.
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25. When was he last in contact with the victim? Was in contact at the time of the accident.	26. Did he issue instructions relative to the accident? Information unavailable
27. Was he aware of or did he express an awareness of any unsafe practice or condition? Information unavailable.	



## Section A—Victim Data

1. Name	2. Sex	3. Social Security Number
Robert Ray Perry, Jr.	<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	406-84-9076
4. Age	5. Job Classification	
23	Section Foreman	
6. Experience at this Classification	7. Total Mining Experience	
5 Months	5 Years 10 Months	
8. What activity was being performed at time of accident?	9. Victim's Experience at this Activity	10. Was victim trained in this task?
Observing a continuous mining machine cutting the mine roof for an overcast.	5 Months	Yes

## Section B—Victim Data for Health and Safety Courses/Training Received (related to accident)

	Date Received
11. Roof Control Plan	06-23-86
12.	
13.	
14.	

## Section C—Supervisor Data (supervisor of victim)

15. Name	16. Certified
Kenneth D. Hartford	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
17. Experience as Supervisor	18. Total Mining Experience
11 Years	18 Years

## Section D—Supervisor Data for Health and Safety Courses/Training Received (related to accident)

	Date Received
19. Roof Control Plan	02-24-86
20.	
21.	
22.	

23. When was the supervisor last present at accident scene prior to the accident?  
Was present at the time of the accident.

24. What did he do when he was there?  
Supervised the cutting of the overcast.

25. When was he last in contact with the victim?

Was in contact at the time of the accident.

26. Did he issue instructions relative to the accident?

Information unavailable.

27. Was he aware of or did he express an awareness of any unsafe practice or condition?

Information unavailable.

APPENDIX B

PERSONS WHO PARTICIPATED IN THE INVESTIGATION

Freeman United Coal Mining Company

Dean Randall	Corporate Manager-Safety Engineering (General Dynamics Corp.)
David A. Beerbower	Vice President-Underground Operations
Thomas J. Austin	Safety Administrator
Warren Hattendorf	Director Employee Relations
Don Dame	Manager of Training and EEO
Francine Rogers	Supervisor Community Relations and Governmental Affairs
Richard R. Elledge	Attorney

Orient No. 6 Mine

Ernie Fletcher	Superintendent
Peter Sheridan	Assistant to the Superintendent
Dan L. Jennings	Maintenance Chief
Michael Simpson	Section Foreman
Charles D. Dame, Jr.	Safety Supervisor

United Mine Workers of America

Danny C. Davidson	Co-Ord. Field Affairs and Training
Joe Cavatorta	International Safety Representative
Joe Urban	International Safety Representative
Tony Kujawa	International Executive Board Member
Jerry Jones	District 12 President
Rick Tygett	District 12 Board Member
Billie E. Howell	Local 1591 President
Warren D. Spann	Local 1591 Vice President
Kenneth Taylor	Preshift Examiner
Danny White	Continuous Mining Machine Operator
Willard L. House	Continuous Mining Machine Helper
Jim T. Wright	Roof Bolting Machine Operator

David Webb  
Clarence White

Roof Bolting Machine Operator  
Shuttle Car Operator

Illinois Department of Mines and Minerals

Brad Evilsizer  
Kim Underwood  
G. B. Wiley  
John Bowen  
Charles F. Greer  
Robert Weatherford  
Robert Pate  
R. E. Jones  
Bob Mooneyham

Director  
Assistant Director  
Member State Mining Board  
Member State Mining Board  
Member State Mining Board  
Member State Mining Board  
Inspector-At-Large  
Inspector  
Inspector

Mine Safety and Health Administration

Maurice S. Childers  
Mike Sakovich  
Mike Wolfe  
Roger W. Uhazie  
Steven R. Kattenbraker  
Thomas W. Buelow  
Michael G. Finnie  
W. Roger Schmidt  
William R. Mitchell  
Robert C. Cross  
David N. Wolfe

District Manager  
Acting Subdistrict Manager  
Supervisory CMS&H Inspector  
Supervisory CMS&H Inspector  
Supervisory Mining Engineer  
Supervisory Mining Engineer  
Senior Special Investigator  
Hydrologist  
CMS&H Inspector (Roof Control)  
CMS&H Inspector  
CMS&H Inspector

APPENDIX C

PERSONS WHO PROVIDED RECORDED STATEMENTS

Ernie Fletcher  
Peter Sheridan

Kenneth Taylor  
Michael Simpson  
Danny White

Willard L. House

Jim T. Wright  
David Webb  
Clarence White

Superintendent  
Assistant to the  
Superintendent  
Preshift Examiner  
Section Foreman  
Continuous Mining Machine  
Operator  
Continuous Mining Machine  
Operator  
Roof Bolting Machine Operator  
Roof Bolting Machine Operator  
Shuttle Car Operator

Section I (Coal Only)

Kenneth D. Hartford

MSHA and/or State Certification and/or Qualification

Mine ID 11-00599Date Training Plan Approved 01-25-80

Date Training Received

Date Training Received

\* ☒ Certified Person (Underground) Orient No. 611-01-85  
02-24-86☒ Dust (Sampling)10-17-75\* ☐ Certified Person (Surface)☐ Dust (Calibration)\* ☐ Methane & Oxygen Deficiency Testing☒ Noise10-17-75\* ☐ Impoundments\* ☐ Electrical\* ☐ Hoisting Engineer\* ☐ Energized Surface High Voltage

\* Annual Retraining Required

Section II (Metal-Non-metal and Coal)

MSHA Training Programs Completed

Date of Hire 02-24-86Date Training Plan Approved 01-25-80

Required Training (Victim)

Date Training Received

☐ Required Training (Victim)

Date Training Received

☐ New Miner (U.B.)☐ Hazard Training (U.G.)☐ New Miner (Sur.)☐ Hazard Training (Sur.)☐ Newly Employed Experienced (U.G.)☒ Newly Employed Experienced (Sur.)08-31-81☒ Annual Refresher (U.G.)03-27-85☐ Annual Refresher (Sur.)

## Task Training Specify Type:

Belt RepairTimbermanGen Inside LaborerBelt CleanerMasonPumperGen. UG Enviror.UG RepairUG SupplyUG WelderCont. MinerRoof BolterUnatracShuttle CarSection III

Company Training Program Completed:

Training

OJT/Formal

Instructor

Date Completed

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Section IV

Kenneth D. Hartford

DID VICTIM HAVE TRAINING SPECIFICALLY RELATED TO THE TASK BEING PERFORMED  
AT THE TIME OF THE ACCIDENT?

☒ YES

☐ NO

WHEN? 02-24-86

BY WHOM? C. Dame

HOW WAS TRAINING GIVEN? Discussion & OJT

---

Section V

RECOMMEND TRAINING PLAN EVALUATION BY EDUCATION & TRAINING OFFICE

☐ YES

☒ NO

---

MSHA and/or State Certification and/or Qualification

Mine ID 11-00599

Date Training Plan Approved <u>01-25-80</u>	Date Training Received	Date Training Received
Orient No. 6		
* <input checked="" type="checkbox"/> Certified Person (Underground)	<u>03-27-85</u> <u>06-25-86</u>	<input checked="" type="checkbox"/> Dust (Sampling) <u>10-82</u>
		<input type="checkbox"/> Dust (Calibration)
* <input type="checkbox"/> Certified Person (Surface)		<input type="checkbox"/> Noise
* <input checked="" type="checkbox"/> Methane & Oxygen Deficiency Testing	<u>05-82</u>	* <input type="checkbox"/> Impoundments
		* <input type="checkbox"/> Hoisting Engineer
* <input type="checkbox"/> Electrical		
* <input type="checkbox"/> Energized Surface High Voltage		
* Annual Retraining Required		

Section II (Metal-Non-metal and Coal)  
 MSHA Training Programs Completed

Date of Hire <u>06-23-86</u>	Date Training Plan Approved <u>01-25-80</u>
------------------------------	---

Required Training (Victim)	Date Training Received	<input type="checkbox"/> Required Training (Victim)	Date Training Received
<input type="checkbox"/> New Miner (U.B.)		<input checked="" type="checkbox"/> Hazard Training (U.G.)	<u>05-06-82</u>
<input type="checkbox"/> New Miner (Sur.)		<input type="checkbox"/> Hazard Training (Sur.)	
<input type="checkbox"/> Newly Employed Experienced (U.G.)		Shuttle Car	Mechanic (UG)
		Gen. UG Environ.	Cont. Miner
		Roof Bolter	Rock Duster
		Unatrac	Timberman
<input type="checkbox"/> Newly Employed Experienced (Sur.)		<b>Task Training</b>	Gen. Inside Laborer
		<b>Specify Type:</b>	Belt Cleaner
<input checked="" type="checkbox"/> Annual Refresher (U.G.) <u>03-27-85</u>		SCSR	Winter Alert
		Roof Control	Electrical Retraining
<input type="checkbox"/> Annual Refresher (Sur.)		Right to Know	Accident Invest. & Prevention
		Truss Bolting	UG Supply
		First Aid	Pumper
		UG Welder	Mason

Section III

Company Training Program Completed:

Training	OJT/Formal	Instructor	Date Completed
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



Appendix D

Section IV

Robert R. Perry, Sr.

DID VICTIM HAVE TRAINING SPECIFICALLY RELATED TO THE TASK BEING PERFORMED  
AT THE TIME OF THE ACCIDENT?

☒ YES

☐ NO

WHEN? 06-25-86

BY WHOM? C. Dame

HOW WAS TRAINING GIVEN? Discussion & OJT

---

Section V

RECOMMEND TRAINING PLAN EVALUATION BY EDUCATION & TRAINING OFFICE

☐ YES

☒ NO

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**Section I (Coal Only)** Robert R. Perry, Jr.

MSHA and/or State Certification and/or Qualification

Mine ID 11-00599Date Training  
Plan Approved 01-25-80  
Orient No. 6Date Training  
ReceivedDate Training  
Received\* ☒ Certified Person  
(Underground)11-01-85  
06-23-86☒ Dust (Sampling)02-26-85\* ☐ Certified Person  
(Surface)☐ Dust (Calibration)\* ☒ Methane & Oxygen  
Deficiency Testing02-82☐ Noise\* ☐ Impoundments\* ☐ Hoisting Engineer\* ☐ Electrical\* ☐ Energized Surface  
High Voltage

\* Annual Retraining Required

**Section II (Metal-Non-metal and Coal)**  
MSHA Training Programs CompletedDate of Hire 06-23-86Date Training Plan Approved 01-25-80Required Training  
(Victim)Date Training  
Received☐ Required Training  
(Victim)Date Training  
Received☒ New Miner (U.B.)09-15-80☒ Hazard Training (U.G.)02-24-82☐ New Miner (Sur.)☐ Hazard Training (Sur.)☒ Newly Employed  
Experienced (U.G.)02-24-82☐ Newly Employed  
Experienced (Sur.)☒ Annual Refresher (U.G.)02-04-85☐ Annual Refresher (Sur.)**Task Training  
Specify Type:**Gen. UG Environ.Shuttle CarMechanic (UG)UnatracCont. MinerRoof BolterFirst AidUG SupplyBelt CleanerPumperMasonGen. Inside LaborerTimberman**Section III**

Company Training Program Completed:

Training

OJT/Formal

Instructor

Date  
Completed

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Appendix D

**Section IV**

Robert R. Perry, Jr.

DID VICTIM HAVE TRAINING SPECIFICALLY RELATED TO THE TASK BEING PERFORMED  
AT THE TIME OF THE ACCIDENT?

☒ YES

☐ NO

WHEN? 06-23-86

BY WHOM? J. Mills

HOW WAS TRAINING GIVEN? Discussion & OJT

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**Section V**

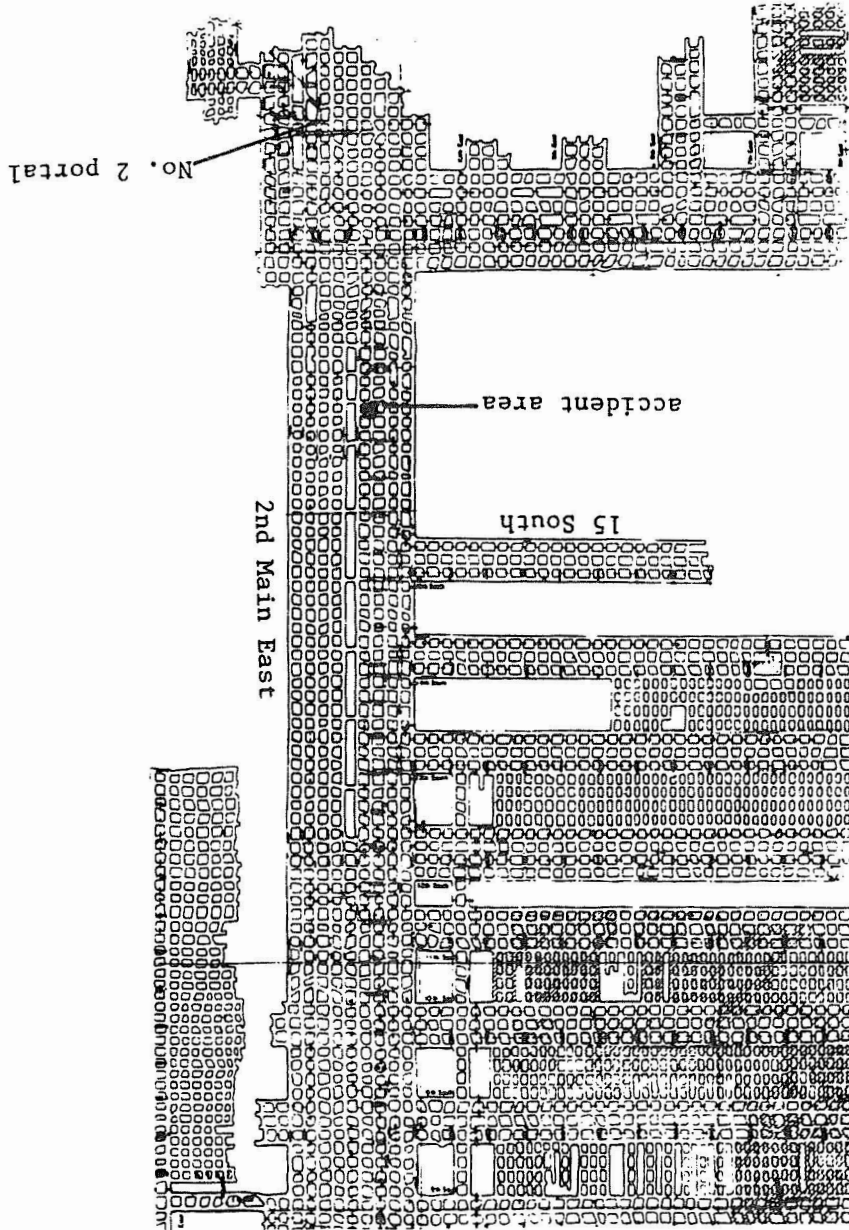
RECOMMEND TRAINING PLAN EVALUATION BY EDUCATION & TRAINING OFFICE

☐ YES

☒ NO

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Orient No. 6 Mine  
(ID No. 11-00599)  
Freeman United Coal Mining Company  
Waltonville, Jefferson County, Illinois  
July 9, 1986





Section I—Violation Data

1. Date	Mo	Da	Yr	2. Time (24 Hr. Clock)	3. Citation/Order Number
07	09	86		1300	2820905

4. Served To	5. Operator
Ernie Fletcher	Freemont Union Coal Mining Company
6. Mine	7. Mine ID
Orient No 1	11-00599

8. Condition or Practice 8a. Written Notice (1-13) ☐

A FATAL ROOF FALL ACCIDENT HAS OCCURRED IN THE 4 MAIN EAST AT THE 113 CROSSCUT KILLING 3 MINE WORKMEN. THIS IS TO PROHIBIT THE AREA FROM BEING DISTURBED AFTER THE BODIES ~~BEING~~ ~~RECOVERED~~ HAVE BEEN RECOVERED, UNTIL THE ACCIDENT INVESTIGATION HAS BEEN COMPLETED. ONLY THOSE PEOPLE INVOLVED IN RECOVERY AND INVESTIGATION ARE PERMITTED IN THE AREA.

9. Violation	A. Health Safety Other	B. Section of Act	C. Part/Section of Title 30 CFR
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

Section II—Inspector's Evaluation

10. Gravity	A. Injury or Illness (has) (is)	No Likelihood <input type="checkbox"/> Unlikely <input type="checkbox"/> Reasonably Likely <input type="checkbox"/> Highly Likely <input type="checkbox"/> Occurred <input type="checkbox"/>
	B. Injury or Illness could reasonably be expected to be	No Lost Workdays <input type="checkbox"/> Lost Workdays or Restricted Duty <input type="checkbox"/> Permanently Disabled <input type="checkbox"/> Fatal <input type="checkbox"/>
	C. Significant and Substantial (See Reverse)	Yes <input type="checkbox"/> No <input type="checkbox"/> D. Number of Persons Affected
11. Negligence (check one)	A. None <input type="checkbox"/> B. Low <input type="checkbox"/> C. Moderate <input type="checkbox"/> D. High <input type="checkbox"/> E. Reckless Disregard <input type="checkbox"/>	
12. Type of Action	103-K-	13. Type of Issuance (check one)
		Citation <input type="checkbox"/> Order <input checked="" type="checkbox"/> Safeguard <input type="checkbox"/>
14. Initial Action	A. Citation <input type="checkbox"/> B. Order <input type="checkbox"/> C. Safeguard <input type="checkbox"/> D. Written Notice <input type="checkbox"/> E. Citation/Order Number	F. Dated
15. Area or Equipment		

THE 3RD 4TH & 5TH MAIN EAST FROM THE 115 CROSSCUT THROUGH THE 112 CROSSCUT.

16. Termination Due	A. Date	B. Time (24 Hr. Clock)

Section III—Termination Action

17. Action to Terminate

18. Terminated	A. Date	B. Time (24 Hr. Clock)

Section IV—Automated System Data

19. Type of Inspection (activity code)	20. Event Number	21. Primary or Mit
AFA	5440609	

22. Signature	23. AR Number
Robert M. Montgomery	21559



## Appendix F

## Section I—Violation Data

1. Date	Mo	Da	Yr	2. Time (24 Hr. Clock)	3. Citation/Order Number
07	10	86	0815	2820906	

4. Served To	5. Operator
ERNIE FLETCHER	FREEMAN UNITED COAL MINING COMPANY
6. Mine	7. Mine ID
ORIENT NO 6	11-00599
(Contractor)	

## 8. Condition or Practice

8a. Written Notice (103n) ☐

The following condition which was an imminent danger existed in the 4th main east travelway. CFR 30 75.200 The rock in the area where an overcast was being constructed was not adequately supported and collapsed resulting in fatal injuries to 3 Foremen.

A separate citation will be issued for the violation included in this order of withdrawal.

See Continuation Form (MSHA Form 7000-3a) ☐

9. Violation	A. Health Safety Other	B. Section of Act	C. Part/Section of Title 30 CFR
	<input checked="" type="checkbox"/>		

## Section II—Inspector's Evaluation

10. Gravity	A. Injury or Illness (has) (is)	No Likelihood <input type="checkbox"/>	Unlikely <input type="checkbox"/>	Reasonably Likely <input type="checkbox"/>	Highly Likely <input type="checkbox"/>	Occurred <input type="checkbox"/>
	B. Injury or Illness could reasonably be expected to be	No Lost Workdays <input type="checkbox"/>	Lost Workdays or Restricted Duty <input type="checkbox"/>	Permanently Disabled <input type="checkbox"/>	Fatal <input type="checkbox"/>	
	C. Significant and Substantial (See Reverse)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	D. Number of Persons Affected		
11. Negligence (check one)	A. None <input type="checkbox"/>	B. Low <input type="checkbox"/>	C. Moderate <input type="checkbox"/>	D. High <input type="checkbox"/>	E. Reckless Disregard <input type="checkbox"/>	
12. Type of Action	107-A-					
13. Type of Issuance (check one)	Citation <input type="checkbox"/>	Order <input checked="" type="checkbox"/>	Safeguard <input type="checkbox"/>			
14. Initial Action	A. Citation <input type="checkbox"/>	B. Order <input type="checkbox"/>	C. Safeguard <input type="checkbox"/>	D. Written Notice <input type="checkbox"/>	E. Citation/Order Number	F. Dated
15. Area or Equipment						

16. Termination Due	A. Date	Mo	Da	Yr	B. Time (24 Hr. Clock)

## Section III—Termination Action

17. Action to Terminate					
18. Terminated	A. Date	Mo	Da	Yr	B. Time (24 Hr. Clock)

## Section IV—Automated System Data

19. Type of Inspection (activity code)	20. Event Number	21. Primary or Mill
AFA	5440609	

22. Signature	23. AR Number
Robert M. Montgomery	21589



## Appendix F

## Section I--Violation Data

1 Date	Mo	Da	Yr	2 Time (24 Hr Clock)	3 Citation/Order Number
07	10	86		0820	2820907
4 Served To				5 Operator	
Ernie Fletcher				FREMONT UNITED COAL MINING COMPANY	
6 Mine				7 Mine ID	
ORIENT NO 6				11-00599 (Contractor)	
8 Condition or Practice				8a Written Notice (103a)	

The ROOF IN THE AREA WHERE AN OVERCAST WAS BEING CONSTRUCTED IN THE MAIN EAST AT #113 CROSSCUT WAS NOT ADEQUATELY SUPPORTED AND COLLAPSED RESULTING IN FATAL INJURIES TO 3 FOREMEN. SUPPLEMENTAL SUPPORT HAD NOT BEEN INSTALLED.

THIS CITATION WAS A FACTOR THAT CONTRIBUTED TO THE ISSUANCE OF IMMEDIATE DANGER ORDER NO 2820907 DATED 7/10/86 THEREFORE, NO ABATEMENT TIME WAS SET

See Continuation Form (MSHA Form 7000-3a)

9 Violation	A Health Safety Other	B Section of Act	C Part Section of Title 30 CFR
			75.200

## Section II--Inspector's Evaluation

10 Gravity			
A Injury or Illness (has) (is): No Likelihood <input type="checkbox"/> Unlikely <input type="checkbox"/> Reasonably Likely <input type="checkbox"/> Highly Likely <input type="checkbox"/> Occurred <input checked="" type="checkbox"/>			
B Injury or Illness could reasonably be expected to be: No Lost Workdays <input type="checkbox"/> Lost Workdays or Restricted Duty <input type="checkbox"/> Permanently Disabled <input type="checkbox"/> Fatal <input checked="" type="checkbox"/>			
C Significant and Substantial (See Reverse): Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			D Number of Persons Affected: 003
11 Negligence (check one): A None <input type="checkbox"/> B Low <input type="checkbox"/> C Moderate <input checked="" type="checkbox"/> D High <input type="checkbox"/> E Reckless Disregard <input type="checkbox"/>			
12 Type of Action: 104-A			
13 Type of Issuance (check one): Citation <input checked="" type="checkbox"/> Order <input type="checkbox"/> Safeguard <input type="checkbox"/>			
14 Initial Action: A Citation <input type="checkbox"/> B Order <input type="checkbox"/> C Safeguard <input type="checkbox"/> D Written Notice <input type="checkbox"/> E Citation/Order Number			
15 Area or Equipment			

16 Termination Due	A Date	Mo	Da	Yr	B Time (24 Hr Clock)

## Section III--Termination Action

17 Action to Terminate

18 Terminated	A Date	Mo	Da	Yr	B Time (24 Hr Clock)

## Section IV--Automated System Data

19 Type of Inspection (activity code)	20 Event Number	21 Primary or Multi
AFA	5440609	

22 Signature	23 AR Number
Robert M. Montgomery	21587