

UNITED STATES  
DEPARTMENT OF LABOR  
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Underground Coal Mine

Fatal Slip/Fall of Person  
August 13, 2007

North River #1 Underground Mine  
Chevron Mining, Inc.  
Tuscaloosa County, Alabama  
I.D. No. 01-00759

Accident Investigators

James R. Boyle, Jr.  
Mining Engineer

Johnny P. Calhoun  
Mining Engineer

Originating Office  
Mine Safety and Health Administration  
District 11  
135 Gemini Circle, Suite 213  
Birmingham, Alabama 35209  
Richard A. Gates, District Manager

## TABLE OF CONTENTS

OVERVIEW.....	1
GENERAL INFORMATION.....	2
DESCRIPTION OF THE ACCIDENT.....	2
INVESTIGATION OF THE ACCIDENT.....	3
DISCUSSION OF THE ACCIDENT.....	3
Site Conditions.....	3
Work History and Training .....	3
Area Description and Work Activities.....	3
Medical Evaluation.....	4
ROOT CAUSE ANALYSIS .....	4
CONCLUSION.....	5
APPENDIX A - Persons Participating in the Investigation.....	6
APPENDIX B - #3 Refuse Belt Rock Bin.....	7
APPENDIX C - Accident Site.....	8
APPENDIX D - Victim Information.....	9



Ladder

Rung victim fell  
from

Fall area

**OVERVIEW**

On August 13, 2007, a 37-year old Surface Operations Coordinator was climbing down a 6.5-ft. permanent vertical ladder when he fell or slipped from the next to last rung. He fell approximately 18 inches to the concrete floor. He landed on both feet, stumbled and fell on his back. He was transported (medical helicopter) to a regional medical center where he complained of back pain. He was released and placed on a regimen of physical therapy. The therapy proved ineffective and on December 18, 2007, surgery was performed on his back as a result of the August 13 accident. He died as a result of bilateral pulmonary emboli on December 19 while in the hospital, having never returned to work since the accident.

The accident occurred because the victim somehow lost 3-point contact while he was climbing down the ladder.

## GENERAL INFORMATION

The North River Mine, I.D. No. 01-00759, is owned and operated by Chevron Mining, Inc. The mine is located approximately 10.3 miles south of Berry, Alabama, on County Road 63. The mine employs, on average, 360 persons and produces approximately 3.5 million tons of bituminous coal annually from the Pratt seam. The mine has one retreating longwall unit and two continuous mining machine development units. The longwall unit normally operates three shifts per day, seven days a week. The continuous miner units normally operate two shifts per day, with one maintenance shift. The miners are represented by the United Mine Workers of America (UMWA).

The principal officers for the mine are:

Mark O. Blue.....Mine Manager

Harry Eaton.....Health, Environmental and Safety Manager

A safety and health inspection was ongoing at the time of the accident. The Non-Fatal Days Lost (NFDL) injury incidence rate for North River Mine for the quarter preceding the accident was 2.55 compared to the national NFDL rate of 4.81.

## DESCRIPTION OF THE ACCIDENT

On August 13, 2007, the victim, Jerry Christopher Lowery, and a subordinate supervisor, Nathan Thomas, were at the #3 Refuse Belt Rock Bin, examining repair work that had been done on the "rock gate" level (See Appendix B,C). As Lowery was climbing down a ladder from this level (See Overview), Thomas, who was still on the rock gate level, observed him fall. Lowery landed on his feet, stumbled backwards and fell on his seat to the concrete floor, his shoulders and head followed. Thomas went to assist him, and was told by Lowery to "give him a minute" and he would be OK. Lowery became increasingly unresponsive and appeared disoriented, prompting Thomas to radio for help.

John Sherrer, Surface Operations Manager (Lowery's supervisor), responded, along with company safety personnel, and local rescue personnel. The regional medical center was contacted and sent a medical helicopter that transported Lowery to the hospital for treatment. He was treated for a back injury and placed on a regimen of physical therapy. This therapy was ineffective and back surgery was performed on December 18, 2007. He died as a result of bilateral pulmonary emboli on December 19 while in the hospital, having never returned to work since the accident.

## **INVESTIGATION OF THE ACCIDENT**

On December 20, 2007, Eli Creel, Safety Coordinator for the North River #1 Underground Mine, notified MSHA Acting Assistant District Manager Judy McCormick that a mine employee had passed away while in the hospital on December 19. He had been injured on the job in August of 2007 and undergone a surgical procedure on December 18<sup>th</sup>. The district opened a chargeability investigation and MSHA accident investigators went to the mine to conduct an accident investigation. The accident investigators made an examination of the accident scene, interviewed witnesses, and reviewed the conditions relative to the scene.

MSHA conducted the investigation with the assistance of mine management and miners' representatives. Persons participating in the investigation are shown in Appendix A. Four people were interviewed during the investigative process.

## **DISCUSSION OF THE ACCIDENT**

### **Site Conditions**

The accident occurred during daylight hours. Based on interviews, the area was dry and there were no extraneous slip/trip/fall hazards present. There were no electrical (shock) hazards or environmental (air quality) hazards identified during the investigation. The ladder the victim was climbing down was securely fixed, equipped with a back guard, and in good repair.

### **Work History and Training**

Lowery had been a surface supervisor at the mine for over five years, and in his current position as the Surface Operations Coordinator for approximately two years. A review of his training records indicated that all his required training was up to date.

### **Area Description and Work Activities**

Coarse refuse from the coal preparation plant is transported to the #3 Refuse Belt Rock Bin (See Appendix B) by conveyor belt, where it is then transferred to the coarse refuse pile by belt or truck. The "rock gate level", where the rock gate that loads trucks is located, is a mezzanine that is approximately 6.5-ft. above the first floor (See Appendix C). The area is accessed by a permanently fixed ladder with a back guard, which extends some 3.5-ft. above the mezzanine level.

On the day of the accident, Lowery and Thomas had gone to the rock bin to inspect repair work that had been completed on the rock gate. After their inspection, Lowery

proceeded to climb down the ladder ahead of Thomas. Based on Thomas's observation, Lowery was on the next to last rung of the ladder, approximately 18-in. above the first floor, when he fell. He landed on both feet, stumbled backward, falling to his seat, with shoulders and head following, dislodging his hard hat. Thomas went to Lowery's aid. When Lowery appeared to be disoriented and unresponsive, Thomas requested help and John Sherrer, Surface Operations Manager responded, along with company safety personnel and local rescue personnel. Sherrer, fearing Lowery may have had a stroke or seizure, requested a medical helicopter to transport Lowery to the hospital.

### **Medical Evaluation**

Lowery was admitted to the hospital on the day of the accident. He was conscious, and complained of numbness/tingling in his lower legs. Doctors performed a variety of tests, and based on an evaluation of these tests and Lowery's complaints, it was determined that he had injured his back and a regimen of physical therapy was prescribed. The therapy did not alleviate Lowery's pain, and he was cleared for the surgery that was performed on December 18.

Nothing in the medical records indicates why Lowery fell. The tests prescribed did not find any evidence of stroke, aneurism, or cardiac episode.

### **ROOT CAUSE ANALYSIS**

An analysis was conducted to identify the most basic causes of the accident that were correctable through reasonable management controls. During the analysis, a root cause was identified that, if eliminated, would have either prevented the accident or mitigated its consequences.

**Root Cause:** The victim could not maintain the 3-point contact necessary to safely climb down the ladder.

**Corrective Action:** Review this accident and train personnel on the importance of maintaining control at all times when using steps, ladders, or inclined walk ways.

## CONCLUSION

On August 13, 2007, a 37-year old Surface Operations Coordinator fell while climbing down a ladder. The fall injured his back, and surgery was performed on December 18, 2007. He subsequently passed away on December 19 while still in the hospital, as a result of bilateral pulmonary emboli. The accident occurred because the victim somehow lost 3-point contact while he was climbing down the ladder.

Approved by:



Richard A. Gates  
District Manager

8/14/07  
Date

## APPENDIX A

### Persons Participating in the Investigation

#### CHEVRON MINING, INC.

John Sherrer (Surface Operations Manager)

Nathan Thomas (Surface Supervisor)

Eli Creel (Safety Coordinator)

John Hargrove (Legal Counsel)

#### UNITED MINE WORKERS OF AMERICA

Edward E. Bailey (Miners' Representative)

#### MINE SAFETY AND HEALTH ADMINISTRATION

James Boyle (District 11 Mining Engineer)

Johnny Calhoun (District 11 Mining Engineer)

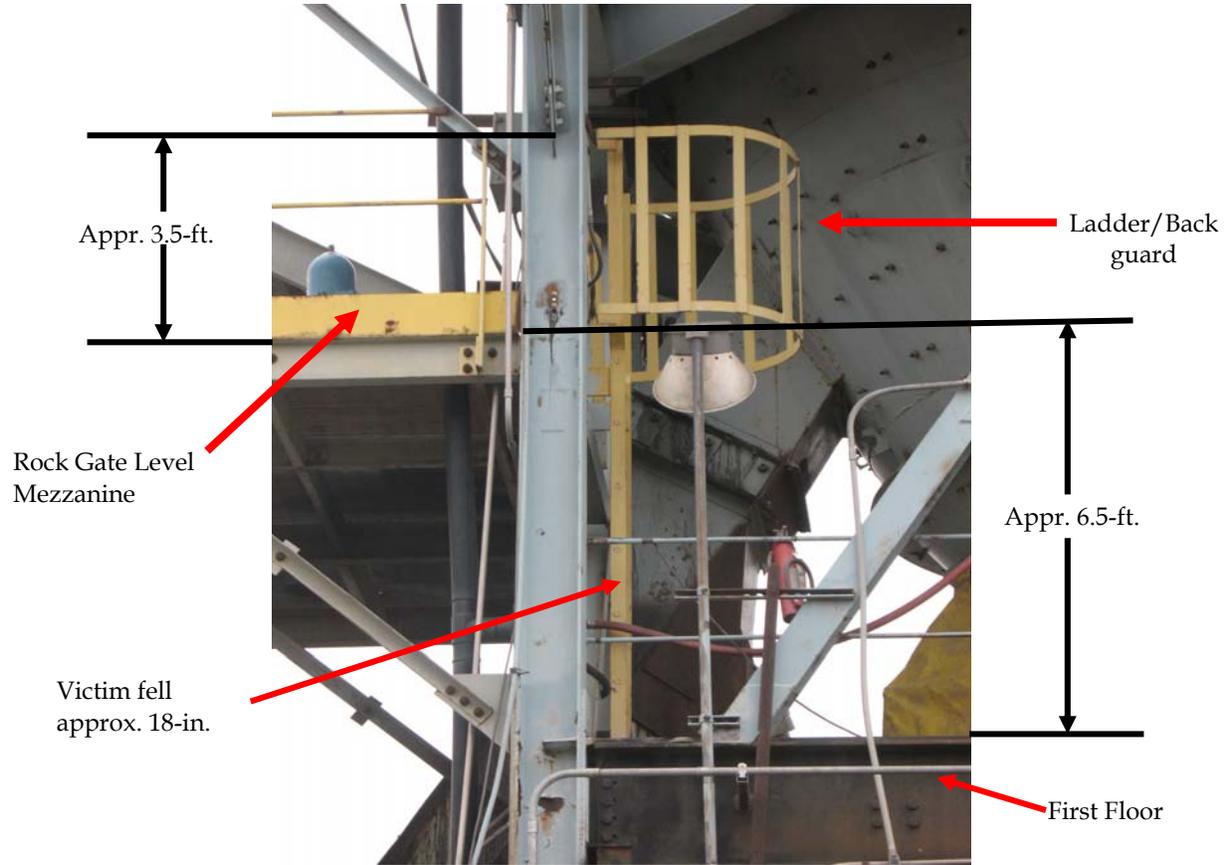
## APPENDIX B

### #3 Refuse Belt Rock Bin



# APPENDIX C

## Accident Site



# APPENDIX D

## Victim Information

**Accident Investigation Data - Victim Information**

**U.S. Department of Labor**  
Mine Safety and Health Administration



Event Number: 4 4 9 1 7 0 1

**Victim Information: 1**

1. Name of Injured/ill Employee: <i>Jerry C. Lowery</i>		2. Sex: <i>M</i>	3. Victim's Age: <i>37</i>	4. Degree of Injury: <i>01 Fatal</i>													
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death: <i>a. Date: 12/19/2007 b. Time: 17:00</i>				6. Date and Time Started: <i>a. Date: 08/13/2007 b. Time: 8:20</i>													
7. Regular Job Title: <i>149 Surface Operations Coordinator</i>			8. Work Activity when Injured: <i>013 Climbing down ladder</i>			9. Was this work activity part of regular job? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											
10. Experience a. This		Years	Weeks	Days	b. Regular Job Title:		Years	Weeks	Days	c. This Mine:		Years	Weeks	Days	d. Total Mining:		
Work Activity:		<i>2</i>	<i>0</i>	<i>0</i>			<i>2</i>	<i>0</i>	<i>0</i>	<i>5</i>		<i>40</i>	<i>0</i>	<i>12</i>		<i>0</i>	<i>0</i>
11. What Directly Inflicted Injury or Illness? <i>010 Fell onto concrete floor injuring back</i>				12. Nature of Injury or Illness: <i>330 Back injury</i>													
13. Training Deficiencies: Hazard: <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>																	
14. Company of Employment: (If different from production operator) <i>Operator</i>				Independent Contractor ID: (if applicable)													
15. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> First-Aid: <input checked="" type="checkbox"/> CPR: <input type="checkbox"/> EMT: <input type="checkbox"/> Medical Professional: <input type="checkbox"/> None: <input type="checkbox"/>																	
16. Part 50 Document Control Number: (form 7000-1)				17. Union Affiliation of Victim: <i>9999 None (No Union Affiliation)</i>													

**Victim Information:**

1. Name of Injured/ill Employee:		2. Sex:	3. Victim's Age:	4. Degree of Injury:												
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death:				6. Date and Time Started:												
7. Regular Job Title:			8. Work Activity when Injured:			9. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>										
10. Experience: a. This		Years	Weeks	Days	b. Regular Job Title:		Years	Week	Days	c. This Mine:		Years	Weeks	Days	d. Total Mining:	
Work Activity:																
11. What Directly Inflicted Injury or Illness?				12. Nature of Injury or Illness:												
13. Training Deficiencies: Hazard: <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>																
14. Company of Employment: (If different from production operator)				Independent Contractor ID: (if applicable)												
15. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> First-Aid: <input type="checkbox"/> CPR: <input type="checkbox"/> EMT: <input type="checkbox"/> Medical Professional: <input type="checkbox"/> None: <input type="checkbox"/>																
16. Part 50 Document Control Number: (form 7000-1)				17. Union Affiliation of Victim:												

**Victim Information:**

1. Name of Injured/ill Employee:		2. Sex:	3. Victim's Age:	4. Degree of Injury:												
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death:				6. Date and Time Started:												
7. Regular Job Title:			8. Work Activity when Injured:			9. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input type="checkbox"/>										
10. Experience: a. This		Years	Weeks	Days	b. Regular Job Title:		Years	Week	Days	c. This Mine:		Years	Weeks	Days	d. Total Mining:	
Work Activity:																
11. What Directly Inflicted Injury or Illness?				12. Nature of Injury or Illness:												
13. Training Deficiencies: Hazard: <input type="checkbox"/> New/Newly-Employed Experienced Miner: <input type="checkbox"/> Annual: <input type="checkbox"/> Task: <input type="checkbox"/>																
14. Company of Employment: (If different from production operator)				Independent Contractor ID: (if applicable)												
15. On-site Emergency Medical Treatment: Not Applicable: <input type="checkbox"/> First-Aid: <input type="checkbox"/> CPR: <input type="checkbox"/> EMT: <input type="checkbox"/> Medical Professional: <input type="checkbox"/> None: <input type="checkbox"/>																
16. Part 50 Document Control Number: (form 7000-1)				17. Union Affiliation of Victim:												