CAI-2008-10

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Underground Coal Mine

Fatal Powered Haulage Accident
May 22, 2008

Oak Grove Resources LLC
Oak Grove Mine
Adger, Jefferson County, Alabama
I.D. No. 01-00851

Accident Investigators

David H. Allen, Jr.
Mining Engineer

Gene Hennen
Mechanical Engineer
Mine Safety and Health Technical Support
Division of Mechanical and Engineering Safety

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

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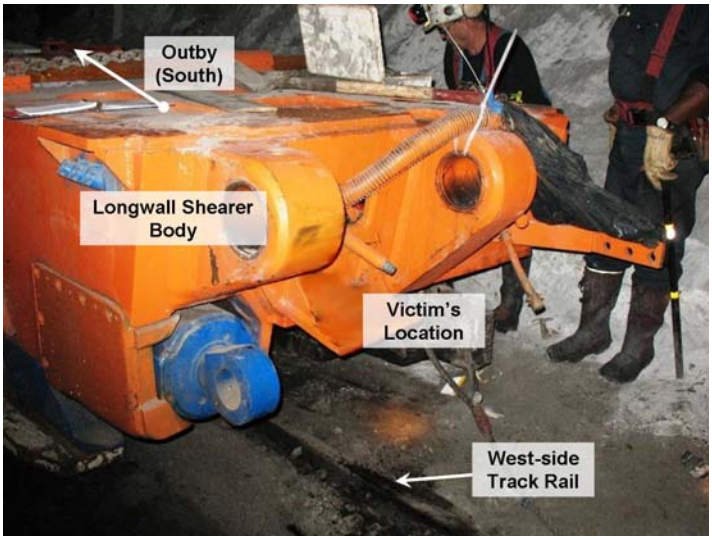
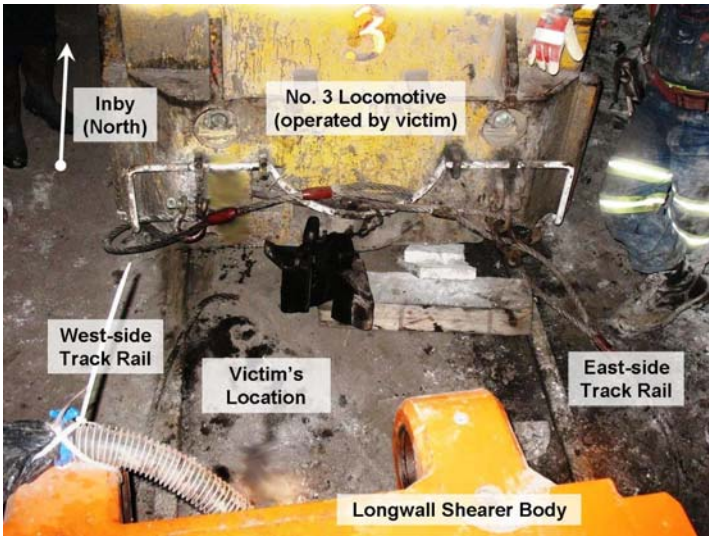




OVERVIEW

At approximately 1:00 p.m. on May 22, 2008, a 64-year old locomotive operator (motorman) was fatally injured when he was pinned between a locomotive (motor) he had been operating and a longwall shearer body he was assisting in transporting. The car on which the shearer body was being transported (carrier) derailed as it was ascending an incline inby a dip in the track entry. The victim was assessing the situation from a location between his motor and the de-railed carrier when his motor, which was coupled to another inby motor, rolled or slid down slope in the outby direction, crushing him between the shearer body and the motor.

Factors related to the accident include: (1) material had been allowed to accumulate on the mine floor outside the track rails and between rails that caused the carrier to derail, (2) the carrier was being pushed along the main haulage road, (3) the two inby motors were stopped on an incline and the parking brakes were not properly set, (4) positive-acting stop blocks or derails were not used to protect persons from danger of run-away haulage equipment, and (5) the victim positioned himself in a pinch point between rail equipment.

GENERAL INFORMATION

The Oak Grove Mine, ID No. 01-00851, is operated by Oak Grove Resources, LLC, and is controlled by Cleveland-Cliffs, Inc. The mine is located in Adger, Jefferson County, Alabama and the active mine status date is January 2, 1981. The mine utilizes five main mine fan shafts, eight intake shafts, a belt slope, and a material slope to provide ventilation and access to the mine. The mine operates three shifts per day and produces coal from the Blue Creek seam six days per week.

A quarterly safety and health inspection was completed on March 31, 2008, and a quarterly inspection was ongoing at the time of the accident. The Non-Fatal Days Lost (NFDL) injury incidence rate for the mine for the previous quarter was 9.83 compared to the national NFDL rate of 4.22 for underground coal mines.

The principal officials of the mine at the time of the accident were:

Paul Hafera……...General Manager
Mike Sumpter…….. Mine Manager
Rex Hartzel…….……..General Mine Foreman
Tim Thompson…….Manager of Safety

DESCRIPTION OF THE ACCIDENT

On Thursday, May 22, 2008, Lee Graham (victim) and three other motormen were transporting a longwall shearer body along the main track haulage road from the bottom area to the 12-West Longwall set-up. The shearer body was being transported on a carrier designed specifically for the job. The order of the motors, by company number, and carrier from the inby end to the outby end was: #8 motor (operated by Kevin Prunesti), #3 motor (operated by Graham), shearer carrier, #4 motor (operated by Alfred Purifoy), and #9 motor (operated by Garey Vincent). Chad Johnson, Assistant General Mine Foreman, was a passenger on the #4 motor. The #4 and #9 motors were coupled together and the #3 and #8 motors were coupled together (see APPENDIX B).

The #4 and #9 motors were being used to push the load with a drawbar coupled and secured to the #4 motor. The #3 and #8 motors were being used to guide the shearer carrier and to help prevent derailment of the carrier via a one-inch wire rope attached diagonally from the outby end of the #3 motor to the inby end of the carrier. The #8 and #3 motors and the carrier were ascending an incline inby a dip in the track entry when the inby end of the carrier derailed. After the carrier derailed, the two inby motors were moved downgrade a short distance to produce slack in the wire rope attached to the carrier. After turning the #3 motor off, Graham exited the operator's compartment. Johnson exited the #4 motor and walked to the inby end of the carrier.

Graham positioned himself between the #3 motor and the carrier to assess the situation. Graham had his back to the #3 motor when it slid or rolled downgrade in the outby direction, crushing him between the shearer body and the #3 motor.

Johnson immediately boarded and started the #3 motor to move both of the motors off the victim. The #8 motor operator, Prunesti, was on his motor when Johnson tried to move the motors uphill. An estimated 20 to 30 seconds elapsed from the time of the accident until the #3 and #8 motors were moved inby and upgrade approximately six feet to free Graham.

Johnson checked Graham's responsiveness. Graham had a pulse but was unresponsive. Johnson notified the lamp house by mine pager phone, requested the assistance of emergency responders, and began CPR. An ambulance and medical helicopter were dispatched to the mine. Additional assistance arrived at the accident site and CPR continued as Graham was transported out of the mine on a personnel carrier via the track slope. Graham was pronounced dead on the surface by a representative of the Jefferson County, Alabama, Coroner/Medical Examiner Office. An autopsy was performed by the Chief Coroner/Medical Examiner of Jefferson County, Alabama, on May 23, 2008, and the cause of death was determined to be extensive blunt force trauma.

INVESTIGATION OF THE ACCIDENT

An MSHA coal mine inspector was conducting an E01 inspection at the mine when the accident occurred and was immediately notified of the accident. At approximately 1:25 p.m. on Thursday, May 22, 2008, Tim Thompson, Manager of Safety at the Oak Grove Mine, contacted the MSHA District 11 Office and reported a serious accident that could result in a death. Accident investigators were sent to the mine and a § 103(k) order was issued to assure the safety of miners until an investigation could be conducted. The accident investigators conducted an examination of the accident scene, interviewed witnesses, and reviewed work conditions relative to the scene. MSHA conducted the investigation with the assistance of state investigators, miners, and mine management. Persons participating in the investigation are shown in APPENDIX A. Four witnesses were formally interviewed during the investigation.

DISCUSSION OF THE ACCIDENT

Locations and Usage of Motors

Pre-operational checks were performed before the motors were used on the day of the accident. The motormen did not observe or report any deficiencies or abnormalities with their respective motors.

The shearer carrier was physically coupled to the #4 motor by a drawbar commonly referred to as a tongue. A one-inch diameter wire rope along the drawbar connected the #4 motor to the shearer carrier. This wire rope served as a safety mechanism to prevent the carrier from accidentally uncoupling from the motor. The #9 motor was coupled to the outby end of the # 4 motor. The #4 and #9 motors were being used to push the carrier to the longwall set-up.

The #3 motor was attached to the shearer carrier by a one-inch diameter wire rope from the east outby end of the motor to the west inby end of the carrier. This wire rope was used to help guide the carrier, particularly around curves, and to prevent derailments by using tension. The #8 motor was coupled to the inby end of the #3 motor. (see APPENDIX B)

The #4 and #9 motors, particularly the braking systems, were examined and found to be functioning properly. Interviews and observations made at the accident site on three separate occasions did not provide any evidence to indicate excessive speed caused or contributed to the derailment of the shearer carrier.

The shearer carrier was being pushed along the main haulage road and there was not a rigid physical connection between the inby motors and the carrier. Using a rigid connection, such as a drawbar or tongue, between the inby motors and the carrier would have eliminated the pinch point between the #3 motor and the carrier.

Safeguard

On March 3, 1986, a safeguard pursuant to § 314(b) of the Federal Mine Safety & Health Act of 1977 was issued to minimize the hazards associated with pushing cars on main haulage roads as prescribed by Title 30, Code of Federal Regulations, § 75.1403-10(b).

Braking Systems

The #3 and #8 motors were equipped with two type 30-30 dual air brake canisters. One canister was mounted on each side of the motors and provided both the air applied service braking function and the spring applied park braking function for both wheels

on the side of the motor on which the canister was mounted. The braking force was applied to the steel wheel by a linkage that forced metal shoes against the steel wheels.

The #8 and #9 motors were 20-ton diesel Brookville Model BDC20UP motors. The #3 and #4 motors were 15-ton diesel Brookville Model BDC15UP motors. Each motor was equipped with functional sanding devices at each wheel. The transmission on each motor consisted of four manually selectable speeds in the inby direction and four manually selectable speeds in the outby direction.

Service Brakes: The controls supplying air pressure to the service brake side of the brake canister include a relay valve and a foot pedal operated brake valve. When the operator pushes the brake pedal, air pressure from the service brake valve opens the brake relay valve which allows air pressure from the air manifold to travel to the service brake side of the air chambers, thus causing the service brakes to apply. When the operator releases the brake pedal, the pressure from the brake valve to the relay valve is released, thus causing the service brakes to release by dumping air from the service brake side of the brake canisters. The brake relay valves on the motors have a single output port to supply air pressure to the service brake sides of both brake canisters. The air lines to the service brake side of the brake canisters are connected together before running to the output port of the service brake valve. Since the brake lines to the brake canisters are connected together, a loss of pressure in the air line to either of the canisters would cause a loss of pressure to the other brake canister. This would render the service brakes on a motor inoperable.

Park Brakes: The springs in the park brake side of the brake canisters provide the force to keep the park brake applied. The park brake pneumatic circuit has an air valve which is used to apply and release the park brake. When the park brake valve is placed in the release position, air pressure releases the park brake by compressing the springs in the park brake chambers in the brake canisters. The park brake is applied by using the park brake valve to dump the air pressure. This causes the spring force to apply the park brake. If pressure is lost in the main system, the park brake valves on the motor are designed to automatically apply the park brake.

After investigative activities relative to the accident site were completed, the loaded shearer carrier was placed on a side track and the #3 and #8 motors taken to the underground motor pit near the elevator bottom. More extensive testing of the braking systems was conducted. These tests revealed that there were no deficiencies in the braking systems of the #3 and #8 motors.

Shearer Carrier

The shearer carrier has been in use at the mine since the late 1980s and was designed and constructed specifically to transport the shearer body. The carrier had a chain track attached to it such that the shearer rests on the car similar to normal positioning on the

longwall face. Once the carrier arrives at the end of the longwall track, the loaded carrier is removed from the track and carried to the set-up face where the shearer is energized and trammed off the carrier and onto the face.

The carrier has very little clearance above the track rails. The bottom of the carrier ranges from approximately 2-1/2 inches to 3-1/4 inches off the rail. The shearer carrier was examined when it was brought to the surface and no visible defects were observed.

Shearer Body

The ranging arms of the Joy 7LS shearer were removed prior to transport so that only the body of the shearer was being transported. The approximate weight of the shearer body was 24 tons.

Prior Derailments

The derailment immediately preceding the accident was the fifth derailment of the carrier during the shift but was the only derailment to have occurred on an incline. The one-inch diameter wire rope connecting the east outby end of the #3 motor to the west inby end of the carrier was used to provide tension to the left side of the carrier in an attempt to keep it from derailing. The wire rope was also useful for guiding the carrier around curves in the track and for putting the carrier back on the track after a derailment. The motormen believed that the derailments were due to a build-up of ground material beside and between the rails since the carrier was very low to the ground.

Following a derailment of the shearer carrier, a length of rail (rerailer) would be placed beneath the carrier. This supplied a smoother surface on which the carrier could slide into position. The material beneath the derailed carrier would have to be removed sometimes so that the rerailer could be used. The inby motors used the one-inch diameter wire rope attachment to pull the carrier as needed to place the carrier into position on the rails. When the accident occurred, Graham was likely assessing the situation to determine the best location to place the rerailer.

General Track Conditions

Visual observations made during the investigation concur with the motormen's opinions that build-up of materials between and beside the rails were causing the shearer carrier to derail. In areas where the build-up was present, it consisted mainly of rock dust and mine floor materials that had built up and solidified. Some areas of build-up were due to floor heave.

Following the accident, the operator was required to clean the build-up of materials for the width of the shearer carrier, including the area between the rails, before the carrier could be advanced inby to the longwall set-up. The operator was also required to pull the carrier with the drawbar instead of pushing the carrier. After the track was cleaned, the carrier was successfully moved to the longwall set-up without additional derailments. The operator chose to use a drawbar on each end of the carrier to complete the move to the longwall set-up. After the shearer body had been removed, the empty carrier was pulled outby and placed on a side track outby the original accident location before being brought out of the mine. Movement of the carrier was observed as it was brought to the bottom area. Cleaning of the outby portion of the track had not been completed and a derailment occurred due to a build-up of material, consisting primarily of rock-dusted floor heave, along the rails. The material caused the wheels on the inby end of the carrier to rise above the rails and the carrier slid off the track.

Conditions and Observations

The accident occurred immediately inby a low area where water had accumulated. A pump was being used to maintain water levels below the rails. The water was not a factor in the shearer carrier derail or the accident.

The area was surveyed following the accident. The track is on an uphill grade of 8.27% inby the low area. Following the derailment of the shearer carrier, the #3 and #8 motors were stopped on this grade. (see APPENDIX B)

A build-up of material consisting primarily of a muddy combination of rock dust and mine floor materials was present beside and between the track rails. This most likely caused the carrier to derail as indicated during interviews.

According to Purifoy and Vincent, operators of the outby (#4 and #9) motors, respectively, they did not move their motors in an outby direction following the derailment of the shearer carrier. Evidence at the scene indicated that the carrier had moved approximately 30 inches in the outby direction after it had derailed. This movement is likely attributable to the collision of the #3 and #8 motors with the shearer body and carrier since the #4 and #9 motors were not moved.

Testing

No visible movement of the #3 and #8 motors occurred from the time immediately following the accident until tests were conducted approximately 46 hours after the accident. The motors had remained stationary on the 8.27% grade with park brakes set on both motors. Stop blocks had been installed approximately one-foot outby the #3

motor on the downhill side in case movement did occur. The locations of the wheels on the #3 motor were noted during the initial site investigation and indicated that movement did not occur.

After clearing the track, controlled tests of the braking systems of the #3 and #8 motors were conducted at the accident site to determine the most likely scenario or scenarios that caused the motors to roll or slide downgrade following the derailment of the carrier. For each test, the motors were placed on the grade at their estimated locations immediately prior to the accident. Their precise locations are estimated because the motors were moved after the accident to free the victim. The tests involved varying the status of each motor's service and park brakes to determine which brakes would hold and the motors' reactions.

The tests revealed that the motors would not move if either the service brakes or the park brakes on either motor were engaged. The tests also took into account the elapsed time between the derailment and the accident, reported to be a couple of minutes but not more than five minutes. This was accomplished by setting the park brake on one of the motors and waiting several minutes to see if movement would occur. No movement occurred when the park brake on either one of the motors was fully applied. The scenario that caused the motors to move downhill occurred when the service brakes and the park brakes were not fully engaged on either motor. During this scenario, the service brakes on the #8 motor were being used to hold both motors in place. Movement of both motors occurred when the service brakes on the #8 motor were disengaged without full application of the park brake. After movement started, applying the service brakes on the #8 motor caused the motor to slide and push the #3 motor downgrade and through the low area.

Work Experience and Training

Except for the #9 motor operator, who had eight months experience as a motorman, the remaining persons operating the motors all had multiple years of experience using motors to move supplies and equipment. Though not classified as a motorman, the operator of the #8 motor was often used for haulage activity due to his considerable experience of approximately 30 years moving equipment with motors. He had been transporting longwall equipment for two weeks prior to the accident. Graham (victim) had been a motorman for over six years. Training records were reviewed and no deficiencies were identified.

Accident Scenario

The evidence presented through interviews, testing, and visual observations indicate that the park brake was not set on the #3 motor at the time of the accident. The park

brake on the #8 motor was also either not set or was not set in time for it to engage fully before moving in tandem with the #3 motor when the victim was struck by the #3 motor.

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, four root causes were identified that, if eliminated, would have either prevented the accident or mitigated its consequences.

Root Cause: Material had been allowed to accumulate on the mine floor outside the track rails and between rails that caused the carrier to de-rail.

Corrective Action: Maintain the track entry, including the area between the rails, clear of debris and floor material for the width of the rail equipment and haulage cars being used and transported in the mine such that there are no obstructions to movement.

Root Cause: The shearer carrier was being pushed along the main haulage road.

Corrective Action: Use a rigid connection, such as a drawbar or tongue, between motors and rail cars to pull cars on main haulage roads except: (1) where necessary to push cars from side tracks located near the working section to the producing entries and rooms, (2)where necessary to clear switches and side tracks, and (3) on approach to cages, slopes, and surface inclines.

Root Cause: The two inby motors were stopped on an incline and the parking brakes were not properly set. Also, positive-acting stop blocks or derails were not used to protect persons from danger of run-away haulage equipment.

Corrective Action: Train persons to park equipment in level areas where possible and to ensure parking brakes on rail-mounted haulage equipment are properly set before releasing the service brake and dismounting the equipment. Use positive-acting stop blocks or derails where there is a danger of run-away haulage equipment.

Root Cause: The victim positioned himself in a pinch point between rail equipment.

Corrective Action: Train persons to be aware of pinch points, the hazards presented by pinch points, and to stay clear of pinch points until assured that equipment has been secured against movement.

CONCLUSION

On May 22, 2008, a 64-year old motorman was fatally injured when he was pinned between the motor he had been operating and a longwall shearer body he was assisting in transporting. The victim was assessing a derailment of the shearer carrier from a location between his motor and the derailed carrier when his motor, which was coupled to another inby motor, rolled or slid down slope in the outby direction, crushing him between the shearer body and the motor. The accident occurred because: (1) material had been allowed to accumulate on the mine floor outside the track rails and between rails that caused the carrier to derail, (2) the carrier was being pushed on the main haulage road, (3) adequate measures were not taken to prevent movement of the inby motors, and (4) the victim positioned himself in a pinch point between rail equipment.

Approved by:

Richard A. Gates
District Manager

12/16/08
Date

ENFORCEMENT ACTIONS

§ 103(k) Order No. 7689549:

A fatal accident occurred at this mine at approximately 1:00 pm when a miner was pinned between a locomotive and a longwall shearer body on a wrecked carrier designed for hauling shearers. This order is issued to assure the safety of miners and prohibits all activity from one crosscut outby the track overcast located just inby the 5-West switch to two crosscuts inby the 5-West switch except that 2 survey crew members may survey the area to ascertain grades and the locations of equipment involved. The 4 locomotives, the shearer carrier, and the shearer are also part of the affected area. The operator shall obtain prior approval from an authorized representative for all actions to recover and/or restore operations to the affected area.

> *Area or Equipment:* The area from one crosscut outby the track overcast just inby the 5-West switch to two crosscuts inby the overcast, locomotives #8, #3, #4, and #9, the shearer carrier, and the shearer body.

§ 104(a) Citation for Violation of Safeguard No. 2604892 Issued March 3, 1986, under § 75.1403-10(b):

A fatal accident occurred on May 22, 2008, when a motorman was crushed between a derailed haulage car and the locomotive he had been operating. The haulage car was being pushed on the main haulage road. The victim would not have been exposed to the pinch point between the locomotive and the haulage car if the car was being pulled instead of pushed on the main haul road.

§ 314(b) Safeguard Issued as Prescribed by § 75.1403-10(e)

CONDITION OBSERVED: A fatal accident occurred on May 22, 2008, when a motorman was crushed between a derailed haulage car and the locomotive he had been operating. The locomotive, along with another coupled to it on the inby end, was parked on an incline. The locomotives rolled or slid down the incline, crushing the victim against the derailed haulage car and its load as he was assessing the derailment.

HAZARD: A hazard exists in that run-away haulage equipment will cause serious injury or death when striking persons or when pinning persons against other equipment or objects.

This is a Notice to Provide Safeguards requiring positive-acting stop blocks, derails, or other equally effective positive-acting means be used where necessary to protect persons from danger of run-away self–propelled, rail-mounted haulage equipment.

§ 314(b) Safeguard Issued as Prescribed by § 75.1403

CONDITION OBSERVED: A fatal accident occurred on May 22, 2008, when a motorman was crushed between a derailed haulage car and the locomotive he had been operating as he was assessing the derailment. The haulage car had derailed a total of 5 times prior to the accident. The investigation revealed that the derailments were due to materials, including floor heave, that were allowed to build-up beside and between the track rails. The materials were causing the haulage car to lose contact with the rail and to slide off track. The accident would not have occurred had the materials been cleaned so that movement of the haulage car was unobstructed. A derailment of the haulage car due to excessive floor materials, including floor heave, was observed as the haulage car was being transported out of the mine following the fatal accident.

HAZARD: A hazard exists in that the build-up of floor materials, including floor heave and solidified rock dust, beside and between the track rails causes the loss of positive control and derailments of the load(s) being transported. Persons performing work to rerail the equipment are subject to serious injury or death due to shifting weight and from other rail-mounted equipment. Persons positioned alongside the track are also exposed to the hazards of uncontrolled loads during a derailment.

This is a Notice to Provide Safeguards requiring that floor materials, including floor heave, will not be allowed to accumulate such that it obstructs safe rail haulage of cars and equipment in the mine.

APPENDIX A

Persons Participating in the Investigation

OAK GROVE MINE

Paul Hafera (General Manager)
Tim Thompson (Manager of Safety)
Adam Ritch (Safety Supervisor)
Rex Hartzel (General Mine Foreman)
Chad Johnson (Assistant General Mine Foreman)
Alfred Purifoy (Chainer/Motorman)
Kevin Prunesti (Shuttle Car Operator/Motorman)
Garey Vincent (Motorman)

STATE OF ALABAMA DEPARTMENT OF INDUSTRIAL RELATIONS MINING AND RECLAMATION DIVISION

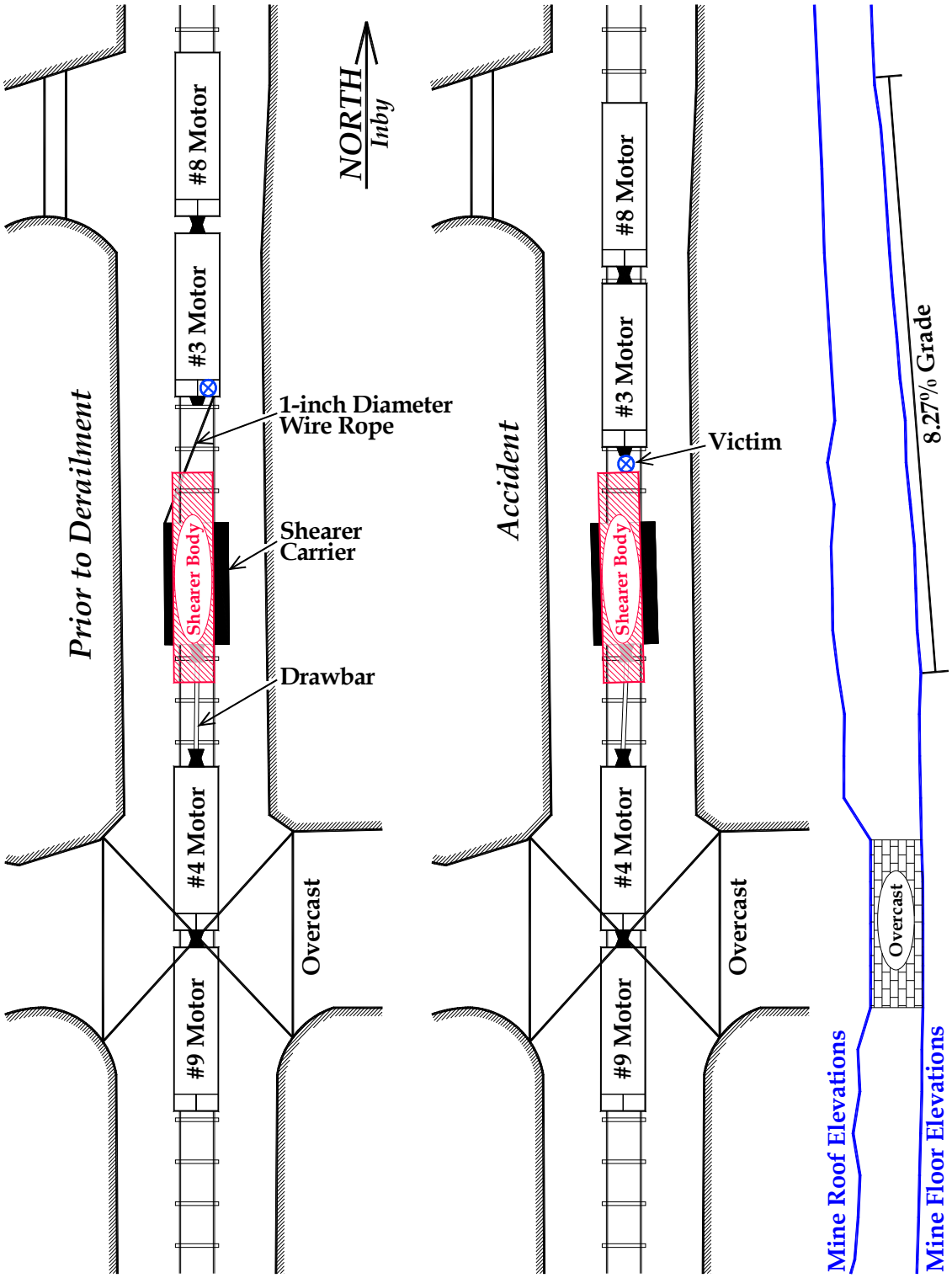
Gary Key (Chief, Mine Safety and Inspection)
Larry McCarty (Mine Inspector)
James Rivers (Mine Inspector)
Leon Herren (Mine Inspector)

MINE SAFETY AND HEALTH ADMINISTRATION

David Allen (District 11 Mining Engineer, Lead Investigator)
Jacky Shubert (District 11 Supervisory Coal Mine Safety & Health Inspector)
Gene Hennen (Mechanical Engineer, Mine Safety and Health Technical Support Division of Mechanical and Engineering Safety)

APPENDIX B

Accident Scene Sketch
(no scale)



APPENDIX C

Victim Information

Accident Investigation Data - Victim Information
Event Number: 4 2 9 7 7 5 6

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

Victim Information: 1

1. Name of Injured/Ill Employee:	2. Sex	3. Victim's Age	4. Degree of Injury:
Lee E. Graham	*M*	*64*	*01 Fatal*

5. Date(MM/DD/YY) and Time(24 Hr.) Of Death: *a. Date: 05/22/2008 b.Time: 13:30*

6. Date and Time Started: *a. Date: 05/22/2008 b.Time: 7:00*

7. Regular Job Title: *069 Motorman*

8. Work Activity when Injured: *075 Assessing derailment of haulage car*

9. Was this work activity part of regular job? Yes X No

10. Experience

	Years	Weeks	Days
a. This Work Activity:	6	16	0
b. Regular Job Title:	6	16	0
c: This Mine:	21	2	0
d. Total Mining:	25	0	0

11. What Directly Inflicted Injury or Illness? *077 Pinned between locomotive and LW Shearer*

12. Nature of Injury or Illness: *170 Crushing*

13. Training Deficiencies:
Hazard: | New/Newly-Employed Experienced Miner: | Annual: | Task:

14. Company of Employment: (If different from production operator) *Operator*
Independent Contractor ID: (if applicable)

15. On-site Emergency Medical Treatment:
Not Applicable: | First-Aid: | CPR: X | EMT: | Medical Professional: | None:

16. Part 50 Document Control Number: (form 7000-1)

17. Union Affiliation of Victim: *2555 United Mine Workers of Amer.*

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 | No

10. Experience:

	Years	Weeks	Days
a. This Work Activity:			
b. Regular Job Title:			
c: This Mine:		Week	
d. Total Mining:			

11. What Directly Inflicted Injury or Illness?

12. Nature of Injury or Illness:

13. Training Deficiencies:
Hazard: | New/Newly-Employed Experienced Miner: | Annual: | Task:

14. Company of Employment: (If different from production operator)
Independent Contractor ID: (if applicable)

15. On-site Emergency Medical Treatment:
Not Applicable: | First-Aid: | CPR: | EMT: | Medical Professional: | None:

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 | No

10. Experience:

	Years	Weeks	Days
a. This Work Activity:			
b. Regular Job Title:			
c: This Mine:		Week	
d. Total Mining:			

11. What Directly Inflicted Injury or Illness?

12. Nature of Injury or Illness:

13. Training Deficiencies:
Hazard: | New/Newly-Employed Experienced Miner: | Annual: | Task:

14. Company of Employment: (If different from production operator)
Independent Contractor ID: (if applicable)

15. On-site Emergency Medical Treatment:
Not Applicable: | First-Aid: | CPR: | EMT: | Medical Professional: | None:

16. Part 50 Document Control Number: (form 7000-1)

17. Union Affiliation of Victim:

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