

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
April 7, 2006

No. 1 Mine
Jacob Mining Company LLC
Naugatuck, Mingo County, West Virginia
ID No. 46-05978

Accident Investigators

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Coal Mine Safety and Health Inspector

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OVERVIEW

At approximately 2:15 p.m. on Friday, April 7, 2006, Robert Runyon, a 48-year-old superintendent, was fatally injured in a powered haulage accident at crosscut 212 along the 3rd East Mains. The accident occurred as Runyon was operating a 14-ton locomotive between the Toms Branch Switch and the North Marrowbone Creek Portal. As the locomotive traveled along the mine track, Runyon struck a 4-inch thick steel crossbar (I-beam) which was dislodged and hanging from the mine roof. The dislodged crossbar had been installed for roof support along the track entry.

The accident occurred when an improperly installed steel crossbar, which was installed for roof support in a close clearance area, became dislodged and the operator of a 14-ton locomotive struck the beam. The crossbeam was not installed in accordance with the approved roof control plan, which requires crossbars along haulage roadways to be provided with a means to prevent the crossbar from falling in the event the supporting legs are accidentally dislodged. A pre-shift examination for hazardous conditions was not conducted, which, if conducted properly, would have identified and corrected the improperly installed roof supports.

GENERAL INFORMATION

The No. 1 Mine, I.D. No. 46-05978 is located near Naugatuck, in Mingo County, West Virginia. The mine utilizes the room and pillar method of mining and operates in the Coalburg bituminous coal seam. The mine began coal production on June 1, 1979. Southern West Virginia Resources leased the mine to Jacob Mining Company LLC and Jacob Mining assumed operation of the mine on June 13, 2005. Jacob Mining operated the production portion of the mine, while Southern West Virginia Resources continued to conduct the work of removal of mining equipment without a contractor identification number.

The No. 1 mine has one active continuous miner section, mining on advance, producing coal on the day and the afternoon shifts. Maintenance is performed on the midnight shift. The mine employs 45 persons of which 40 are underground employees. Shuttle car haulage is used at the face areas. The mine produces approximately 3500 tons daily.

The principal officers for the mine at the time of the accident were:

Jeffrey Wolford	Owner
Michael Shawn Norman	Superintendent
Dale Oliver	Mine Foreman
Ray Wolford.....	Electrician
Roger Ball, Sr	Safety Manager

The last inspection of the mine by the Mine Safety and Health Administration (MSHA) was completed on March 24, 2006. The NFDL rate for the mine was 6.62 in 2005. The national NFDL rate for mines of this type was 5.18 in 2005.

DESCRIPTION OF THE ACCIDENT

On April 7, 2006, at approximately 7:30 a.m., four contract general laborers employed by Quality Enterprises, Inc. under the direction of Robert Runyon, Superintendent for Southern West Virginia Resources, began the shift. Runyon instructed the crew to recover conveyor belt structure from the No. 8 conveyor belt. Runyon further instructed the crew to take a set of cutting torches inside the mine in case the scoop would not clear a low area, which was located at Crosscut 212. At 8:00 a.m., a 3-person crew comprised of Paris Sheppard, Bill McClanahan, Jason Hamrick, General Laborers, traveled inside the mine to begin the work. At approximately 8:30 a.m., Runyon and Chad Wilson, General Laborer, traveled into the mine on a 14-ton locomotive pulling a flat car. The two groups met at the Tom's Branch switch, where a 4-person rail mounted mantrip was parked. The 3-person crew took the scoop off of charge and trammed along the track haulageway to the low clearance area.

The low clearance was due to 4 and 6-inch I-beams installed to support the mine roof where a roof fall had previously occurred. The overall height of the scoop was too high to allow the machine to clear the low area. Runyon and Wilson arrived at the location of the scoop and parked the 14-ton locomotive and flat car. The scoop was trammed outby and Runyon and the crew used a cutting torch to remove the rear lights and the operator's canopy, which reduced the overall height of the machine.

The 3-person crew trammed the scoop through the low area and proceeded to the No. 8 conveyor drive. The crew loaded a belt conveyor tailpiece onto the scoop and transported it to the Tom's Branch switch where it was loaded onto the flat car. Runyon and Wilson used the locomotive to transport the tailpiece to the surface as the 3-person crew returned to work at the No. 8 belt conveyor drive. At approximately 11:30 a.m., Runyon and Wilson arrived at the surface and began unloading the tailpiece.

At approximately 1:25 p.m., Runyon and Wilson reentered the mine to retrieve additional belt conveyor components. When they arrived at the Tom's Branch switch, Wilson exited the locomotive to get the 4-person rail mounted mantrip off of charge so it could be used to transport the 3-person crew out of the mine. Runyon continued to travel in the locomotive, in an inby direction along the mine track.

As the 3-person crew was working to remove belt conveyor structure, the scoop broke down. Unable to continue their work, the crew began walking outby along the track entry. At approximately 2:15 p.m., they noticed Runyon's lights traveling inby along the mine track at Crosscut 212 and heard a loud crashing noise from that location. The crew ran towards the noise where they found that roof support material had fallen on the locomotive and that Runyon had been impaled by one of the dislodged 4-inch crossbars. Sheppard and McClanahan began to remove loose crib blocks and crossbars from the top of the locomotive in an attempt to free the victim. Meanwhile, Hamrick went to call for help on a mine phone.

Responding to the call on the mine phone, Michael Shawn Norman, Mine Superintendent; Bill Miller, Emergency Medical Technician; and Jasper Norman, Supply Man, entered the mine to help free the victim. The victim was removed from the locomotive and transported to the surface in a rail mounted mantrip. He was pronounced dead at the mine by the Mingo County Coroner.

INVESTIGATION OF THE ACCIDENT

MSHA was notified at 2:30 p.m. on April 7, 2006, that a serious accident had occurred at the No. 1 Mine. MSHA personnel from the Logan, West Virginia Field Office traveled to the mine, and issued a 103(k) order to ensure the safety of all persons during the accident investigation.

MSHA accident investigators began an accident investigation in cooperation with the West Virginia Office of Miner's Health, Safety, and Training (WVOMHST), the mine operator, and Southern West Virginia Resources LLC. Interviews were conducted with persons who had knowledge relevant to the accident. A list of those persons who participated in the investigation can be found in Appendix A.

DISCUSSION

Human Factors

The victim had no known physical impairments or medical conditions that would have contributed to the accident. The victim had 28 years of mining experience and had been employed at this mine for approximately 22 years. He had been a mine foreman/superintendent at this mine for approximately 20 years.

Accident Scene

The accident occurred along the main track haulage entry between the Toms Branch switch and the North Marrowbone Creek Portal at crosscut 212 where an old roof fall had previously occurred. When the roof fall was rehabilitated, 4 and 6-inch crossbars and cribs, supported by cribs, jacks, and vertical I-beams, were installed to control the roof. Some of the crossbars had been installed when the area of the mine was initially developed, 10 to 15 years prior to the accident.

The roof support included five 4-inch steel crossbars (approximately 14 feet long) installed perpendicular to the track entry, and four 4-inch steel crossbars (approximately 6 feet long) installed parallel to the track entry. Crib blocks had been installed between the parallel steel crossbars and the mine roof.

On the outby edge of the fall cavity, a crossbeam supported by cribs was installed across the entry. The right crib (looking inby) had been hit by a piece of machinery. On the right side of the track, outby the fall cavity was a 4-inch thick, bent, crossbeam approximately 14 feet in length. Under the right side of the cross beam was a roof support jack, 58 ³/₄" long which had scuff marks where it had been struck by a piece of equipment.

The original height of the track entry at the location of the accident ranged from 6 to 8 feet. However, the installation of the crossbeams reduced the vertical clearance in the area to 55-¼ inches between the top of the right track rail and the crossbeams and 56-½ inches between the top of the left track rail and the crossbeams.

Horizontal clearance in the area was reduced to 11 feet between the cribs supporting the crossbeams. The width of the locomotive was 7 feet 7 inches and therefore should have cleared the crib supports. Prior to the accident, a scoop was used to transport a conveyor belt tailpiece through the low clearance area. The scoop that was used to haul a tailpiece in by the accident scene earlier that day was 9'-3" wide. Since the scoop was not confined to the track rails and had tighter clearance through the area, either the scoop or the tailpiece impacted the crib supports and dislodged the crossbeams.

Roof Control Plan

Page 6, Item 11 of the approved roof control plan dated July 15, 2005 requires, "Where crossbars are installed along haulage roadways they shall be provided with a means to prevent the crossbar from falling in the event the supporting legs are accidentally dislodged." However, no means had been provided at the accident site to prevent the crossbars from falling when the supporting legs were struck by mobile equipment and dislodged.

ROOT CAUSE ANALYSIS

An analysis was conducted to identify the most basic causes of the accident. During the analysis, root causes were identified that if eliminated would have either prevented the accident or mitigated its consequences. Listed below are root causes identified during the analysis and their corresponding corrective actions implemented to prevent a reoccurrence of the accident.

Root Cause: Jacob Mining Company LLC and Southern WV Resources LLC did not ensure compliance with the written procedures for installing roof support in road ways, as approved in the roof control plan. The approved roof control plan requires, "where crossbars are installed along haulage roadways they shall be provided with a means to prevent the crossbar from falling in the event the supporting legs are accidentally dislodged." This provision was not complied with at the accident site. Additionally, 138 additional steel crossbars that were improperly installed from the Marrowbone Creek Switch to the Number 8 Belt Head.

Corrective Action: Page 6, Item 11 of the roof control plan was revised to require an examination by a certified foreman of all additional roof support. The examination must be conducted on the next preshift examination following the installation of the support. The foreman shall further verify that the crossbars have been properly secured and a record of the observation will be maintained in the preshift or on-shift examination record. The mine operator trained all employees on the revised provision of the roof control plan.

Root Cause: A pre-shift examination of the working areas, from the Tom's Branch track switch to the Number 8 belt conveyor drive, was not conducted. Dates, times, and initials were not placed to indicate that an examination was conducted and a record of the required examination was not maintained. The mine operator did not conduct the required examinations because it was believed that Southern West Virginia Resources was responsible for conducting examinations of the areas in which Southern West Virginia Resources was working. The mine operator did not ensure that a workplace examination had been conducted.

Corrective Action: The mine operator re-instructed all miners in the provisions of the roof control base plan and revisions. All certified foreman and pre-shift examiners were instructed in the proper procedures for conducting, recording, and correcting workplace examinations.

CONCLUSION

The accident occurred when an improperly installed steel crossbar, which was installed for roof support in a close clearance area, became dislodged and the operator of a 14-ton locomotive struck the beam. The crossbeam was not installed in accordance with the approved roof control plan, which requires crossbars along haulage roadways to be provided with a means to prevent the crossbar from falling in the event the supporting legs are accidentally dislodged. A pre-shift examination for hazardous conditions was not conducted, which, if conducted properly, would have identified and corrected the improperly installed roof supports. The operator did not have sufficient oversight procedures in place to ensure compliance with their roof control and examination responsibilities.

Approved by:

ORIGINAL SIGNED BY

Jesse P. Cole
District Manager

JULY 17, 2006

Date

ENFORCEMENT ACTIONS

1. 103(k) order number 7248616 was issued to Jacob Mining Co., LLC to ensure the safety of all persons until an investigation was completed and the area was deemed safe.
2. A 104(a) citation number 7248622 was issued to Jacob Mining Co., LLC for a violation of 75.220(a) (1). The approved roof control plan was not being complied with in the track entry at crosscut no. 212 between Tom's Branch Switch and North Marrowbone Creek Portal. A roof fall had occurred at crosscut number 212. The fall area was being supported by five 4-inch steel beams (approximately 14 feet in length) across the track, four 4-inch steel beams (approximately 6 feet in length) installed parallel to the track, and crib blocks were installed between the parallel steel beams and the unsupported mine roof. The steel crossbars were not secured to prevent them from falling when at least one of the supporting legs was accidentally dislodged by a piece of machinery. One of the 4-inch thick, 6-foot long, beams installed parallel to the track entry struck the locomotive operator resulting in fatal injuries. The condition contributed to a fatal mining accident which occurred on April 7, 2006. Additionally, 138 unsecured steel crossbars were present along the main line track entry starting at the Marrowbone Creek Switch at crosscut 118 and extending to the Toms Branch Switch at crosscut 177.
3. A 104(a) citation number 7248623 was issued to Southern WV Resources, LLC for a violation of 75.220(a)(1). The approved roof control plan was not being complied with in the track entry at crosscut no. 212 between the Tom's Branch Switch and the North Marrowbone Creek Portal. A roof fall had occurred at crosscut number 212. The fall area was being supported by five 4-inch steel beams (approximately 14 feet in length) across the track, four 4-inch steel beams (approximately 6 feet in length) installed parallel to the track, and crib blocks were installed between the parallel steel beams and the unsupported mine roof. The steel crossbars were not secured to prevent them from falling when at least one of the supporting legs was accidentally dislodged by a piece of machinery. One of the 4-inch thick, 6-foot long, beams installed parallel to the track entry struck the locomotive operator resulting in fatal injuries. The condition contributed to a fatal mining accident which occurred on April 7, 2006. Additionally, 138 unsecured steel crossbars were present along the main line track entry starting at the Marrowbone Creek Switch at crosscut 118 and extending to the Toms Branch Switch at crosscut 177.
4. A 104(a) citation number 7248624 was issued to Jacob Mining Co., LLC for a violation of 75.360(a)(1). An adequate preshift examination was not conducted in the track entry from the Marrowbone Creek Switch at crosscut

118 to the Tom's Branch Switch at crosscut 177. The hazardous condition of 138 unsecured steel crossbars existed along the main line track entry. Additionally, a pre-shift examination of the working areas from the Tom's Branch switch to the Number 8 belt conveyor drive was not conducted. A hazardous condition existed from crosscut 212 to 213 in the track haulage entry, where steel crossbars were installed as roof support across the track entry, and were not supported to prevent being dislodged if contacted by equipment. A proper pre-shift examination would have identified, recorded and corrected the hazardous conditions. The required dates, times and initials were not posted from the Tom's Branch track switch to the number 8 belt conveyor drive to indicate an examination had been conducted and a required record of the examination was not maintained. The condition contributed to a fatal mining accident which occurred on April 7, 2006. Jacob mining asserted that Southern West Virginia Resources, LLC was conducting the required examinations from the Tom's Branch track switch to the number 8 belt conveyor drive where Southern West Virginia Resources, LLC was actively working.

5. A 104(d)(1) citation number 7248625 was issued to Southern WV Resources, LLC for a violation of 75.360(a)(1). A preshift examination of the working areas, from the Tom's Branch track switch to the number 8 belt conveyor drive, was not conducted. A hazardous condition existed from crosscut 212 to 213 in the track haulage entry, where steel crossbars were installed as supplemental roof support across the track entry, and were not supported to prevent being dislodged if contacted by equipment. A proper pre-shift examination would have identified, recorded and corrected the hazardous conditions. The required dates, times, and initials were not posted in the area to indicate an examination had been conducted and the required records of the examination were not maintained. The condition contributed to a fatal mining accident which occurred on April 7, 2006. The violative condition was readily visible and the operator has exhibited aggravated conduct beyond ordinary negligence. This violation is an unwarrantable failure to comply with the cited mandatory standard.

APPENDIX A

List of Persons Participating in the Investigation

Jacob Mining Company LLC

Jeffrey Wolford Owner
Michael Shawn Norman Superintendent
Dale L. Oliver..... Mine Foreman
Chris Muncy Second shift Mine Foreman
Jasper Norman Supply Man / Motorman

Southern West Virginia Resources LLC

Robert "Bud" Baldwin Project Manager
Jim Bunn, II Owner
Mike Propst..... Superintendent of Underground Operations
Kenny Morgan..... Chief Electrician

Spilman, Thomas, And Battle

David J. Hardy..... Attorney
Dennise Smith-Kastick Attorney

Quality Enterprises, Inc.

Arthur White Owner
Israel Thompson..... Superintendent
Paris Sheppard General Laborer
Jason Hamrick General Laborer (Red Hat)
Chad Wilson General Laborer (Red Hat)
Bill McClanahan..... General Laborer

Belo Mine Service

Jimmy Hammonds..... Electrician

West Virginia Office of Miner's Health, Safety and Training

Dennis Ballard Inspector-at-Large
C. A. Phillips Deputy Director
Terry Farley..... Accident Investigator
James Dean..... Director
John Griffith Inspector
Harrison Stollings Inspector

Mine Safety and Health Administration

Gerald L. Cook, Sr Coal Mine Safety and Health Specialist
Sharon A. Cook Coal Mine Safety & Health Specialist
Eugene D. Hennen Mechanical Engineer
Vicki L. Mullins Coal Mine Safety and Health Inspector
Donald E. Winston Coal Mine Safety and Health Specialist (Roof Control)