UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Underground Coal Mine
Fatal Fall of Roof Accident
July 25, 2008

at

Buchanan Mine #1
Consolidation Coal Company
Mavisdale, Buchanan County, Virginia
ID No. 44-04856

Accident Investigator

Hagel Campbell
Field Office Supervisor

Originating Office
Mine Safety and Health Administration
District 5
P.O. Box 560, Wise County Plaza
Norton, Virginia 24273
Ray McKinney, District Manager

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OVERVIEW

At approximately 1:05 p.m. on Friday, July 25, 2008, Elden Todd Meadows, age 44, a roof bolting machine operator with 22 years of mining experience, was fatally injured at Consolidation Coal Company's Buchanan Mine #1. The victim was installing roof support with the left side of a Fletcher dual-head roof bolting machine in the 3 Right crosscut on the 004-0 Mechanized Mining Unit (MMU), located on 12 Right panel off of 3 East Mains. The victim was marking roof bolt locations between the Automated Temporary Roof Support (ATRS) and operator's canopy, when a section of mine roof fell. The falling rock struck the victim, forcing him into the inby edge of the operator's canopy, resulting in fatal head trauma.

A roof anomaly (slickensided slip) was present, but not detected during the roof examination conducted prior to roof bolting operations in the 3 Right crosscut. The slip fell without warning while roof bolt locations were being measured and marked.

Another factor which contributed to the accident was the positioning of the operator's canopy. The canopy was positioned 20 inches below the mine roof.

GENERAL INFORMATION

Consolidation Coal Company's Buchanan Mine #1, I.D. No. 44-04856, is an underground coal mine located two miles south of Route 460, adjacent to State Route 632, at Mavisdale, Buchanan County, Virginia. Consol Energy, located in Pittsburgh, Pennsylvania, is the parent company of Consolidation Coal Company. The principal officers for the mine at the time of the accident were:

Jack Richardson	V.P. Central Appalachia Operations
Bill Meade	General Superintendent
Tim Underwood	Superintendent
Craig Chadwell	Assistant Superintendent
Leonard Clarkson	Mine Foreman

The mine has 10 shaft openings into the Pocahontas No. 3 Seam. The seam averages 72 inches in height. Seven fans exhausting 3.4 million cubic feet of air per minute provide ventilation. Laboratory analysis of return air samples shows a methane liberation rate of 11.1 million cubic feet per day through the mine fans. The development unit face areas are ventilated using a double split system of ventilation and exhausting line curtains.

Employment is provided for 536 miners. A total of 476 underground and 60 surface miners work on three production shifts per day, seven days per week.

No shifts are designated as maintenance shifts. The mine produces an average of 14,000 tons of raw material daily from six continuous mining machine units (three "super" sections), and one longwall unit. Coal is transported from the faces by shuttle cars, battery powered ram cars and a longwall face conveyor. It is transported to the production shaft bottom by a belt conveyor system (which includes two bunker surge storage areas), and out of the mine by skip hoist cars. A diesel-powered track haulage system is used to transport both men and materials.

The mine is developed for support of longwall mining. Longwall panels are developed 750 feet wide by 11,500 feet long. Longwall development panels are advanced with continuous mining machines. At the time of the accident, mining was ongoing on the 12 Right panel off 3 East Mains. The 12 Right panel is a super section consisting of two MMUs. Entries No. 1 and No. 2 make up the 003-0 MMU (left side), and Entries No. 3 and No. 4 make up the 004-0 MMU (right side). The accident occurred on the 004-0 MMU.

Methane within this mine is removed by degasification of the seam with holes drilled and fractured in the virgin areas (frac holes) prior to mining, horizontal degasification holes drilled on the tailgate side of the longwall and by vertical degasification boreholes (gob holes) in the fall areas created by extraction of longwall panels.

MSHA completed the last regular health and safety inspection of the mine on June 26, 2008; however, a regular safety and health inspection was commenced on July 1, 2008, and was ongoing at the time of the accident. The Non-Fatal Days Lost (NFDL) injury incidence rate for the mine in 2007 was 0.94 compared to a National NFDL rate of 4.71.

DESCRIPTION OF THE ACCIDENT

On Friday, July 25, 2008 at approximately 8:00 a.m., the day shift crew, under the direction of Curtis Gibson, Section Foreman, entered the mine via the Contrary shaft elevator. They made a vertical descent of approximately 1,800 feet to the shaft bottom where they boarded track mounted diesel mantrips and rode approximately 4 miles to the 12 Right panel off 3 East Mains. The crews arrived on the 003/004 MMU at approximately 8:45 a.m. and waited in the dinner area, two crosscuts outby the No. 2 entry face, while Gibson made an examination of the face areas. Gibson then held a brief safety meeting with the crew before they went to their assigned work locations.

After leaving the dinner hole at the start of the shift, Billy Brown, Faceman (utility man), went to the right side continuous mining machine to finish the first

cut out of 3 Right crosscut. The cut had been started by the owl (midnight) shift production crew. After finishing the cut, Brown backed the mining machine into the No. 3 entry and parked it just outby the last open crosscut. The right side roof bolting machine crew, Todd Meadows and his brother Rocky Meadows, were waiting in the last open crosscut adjacent to the No. 3 entry with the Fletcher dual head roof bolting machine. After the continuous mining machine was backed outby the crosscut, the roof bolting machine was taken through the No. 3 entry to the 3 Right crosscut and the Meadows brothers bolted the fresh cut. The roof bolting machine was backed out of 3 Right crosscut and placed back in the last open crosscut. The freshly bolted place was scooped and rock dusted and Brown set the mining machine up in 3 Right in preparation of taking a second cut. The shuttle cars and haulers were being loaded on the left side of the section at this time so Brown ate dinner.

Brown asked Rocky to help him with the second cut to be taken out of the 3 Right crosscut because the first cut was not properly centered and Brown considered Rocky a more experienced continuous mining machine operator. Brown stated that Rocky cut about half the place and went to eat dinner. Brown finished cutting the left side of the place. After finishing the cut, Brown backed the miner into the No. 3 entry just outby the last open crosscut to allow the roof bolting machine operators to bolt the new cut in the 3 Right crosscut.

Todd Meadows operated the left, or operator's side of the Fletcher dual head roof bolting machine and Rocky Meadows operated the right, or off side of the machine. The roof bolting machine was moved into position in the 3 Right crosscut. The roof bolting crew installed two rows of roof support and Todd trammed the roof bolting machine forward in preparation of installing a third row. Rocky, off-side operator, guided the machine into place as it was trammed forward. Rocky used a piece of key steel welded on top of the canopy as a reference point when guiding the bolt machine into position. When the piece of key steel was positioned underneath the last installed roof bolt, he signaled Todd to stop tramming the machine forward. This ensured that the distance between the rows of roof bolts did not exceed 4 feet. Todd then set the ATRS of the roof bolting machine against the mine roof. This was the normal procedure for advancing the roof bolting machine in the face areas. Rocky stated that he made a visual observation of the roof conditions and listened to the roof as the ATRS was set. He did not detect any adverse roof conditions during either test. He did not observe any loose rock that had fallen when they pulled into the second cut.

The crew members were in the following locations immediately prior to the accident. Thomas Arms, Shuttle Car Operator, and Robert Deel, Utility Man, were located two crosscuts outby the face of the No. 2 entry at the dinner area. Billy Brown, was operating the right side continuous mining machine, Rick L.

Koeger, Section Electrician, and Curtis Gibson, Section Foreman, were located near the right side continuous mining machine which was located in the No. 3 entry just outby the last open crosscut and approximately 170 feet from the accident site. Matt Sutherland, Right Side Roof Bolting Machine Operator, was operating a hauler in the No. 2 heading, Tim Boggs, Hauler Operator, was at the feeder in the No. 3 entry, Roby Thomas, Right Side Continuous Mining Machine Operator, was operating the continuous mining machine in the No. 2 heading and William Rasnake, Scoop Operator, was in the No. 3 entry inby the feeder.

After the ATRS was set, both Todd and Rocky began to mark roof and rib bolt placement with their chalk sticks. A chalk mark was found on the rib and on a piece of the fallen rock on the operator's side (Todd's side). Rocky stated that after he finished marking bolts on the off-side, he turned his back to Todd to place his marking stick up against the rib. While his back was turned he heard the roof fall. He stated that when he turned around he could not see Todd. He yelled for Todd but heard no answer. Rocky ran over to the operator's side of the machine and tried to get Todd to respond. There was no rock on Todd. When Todd did not respond he yelled for help. Brown, Gibson and Koeger heard Rocky yelling and saw him running out of 3 Right crosscut. Gibson and Brown ran toward 3 Right and Koeger went toward the dinner area to get the first-aid supplies. When Gibson and Brown got to the roof bolting machine, Gibson told Brown to call outside and tell them about the accident. On the way to the phone Brown ran into Rasnake and told him to get the first-aid kit. Brown traveled to the feeder, located in No. 3 entry, called outside and informed security about the accident. The Dismal River Rescue Squad was informed of the accident at 1:11 p.m. and was en route to the mine at 1:14 p.m. Brown told Boggs to try to contact Archie Ruble, Mine Foreman, and have the track cleared. Rasnake traveled toward the first-aid supplies located in No. 2 entry. He saw Arms and Deel sitting at the dinner area. He yelled for them to bring the first-aid supplies to 3 Right crosscut. Koeger arrived at the dinner hole at this time and informed Arms and Deel of the accident. The three men took the first-aid supplies to 3 Right crosscut. Rasnake was at the roof bolting machine with Curtis Gibson when the men arrived with the first-aid supplies. Rasnake, certified in Advanced First-Aid, took charge of caring for the victim. He instructed Gibson to bandage the cut on the victim's head while he prepared the victim to be loaded onto the backboard. The victim was loaded onto the backboard and taken to the mantrip. Rasnake stated that when they got to the mantrip he checked the victim for a pulse. At that time he was breathing and had a pulse. When they got to the mouth of 12 Right panel, Rasnake told Brown, who was operating the mantrip, to cut it off so he could check for a pulse. Rasnake could not find a pulse at this time so he started cardio-pulmonary resuscitation (CPR) on the victim. They continued toward the surface and near 11 Right panel, Ruble got on the mantrip to help Rasnake. Ruble gave rescue

breaths while Rasnake continued chest compressions. Rasnake and Ruble continued to perform CPR until they arrived on the surface at 1:47 p.m. and turned the victim over to the Dismal River Rescue Squad. The rescue squad left mine property at 1:49 p.m. transporting the victim to Clinch Valley Medical Center located in Richlands, Virginia. Todd Meadows was pronounced dead at 2:07 p.m. by the Emergency Room Physician.

INVESTIGATION OF THE ACCIDENT

On July 25, 2008, at approximately 1:10 p.m., MSHA inspector Steve Hale was notified by Don Hylton, Ventilation Supervisor for Buchanan Mine #1, that a serious accident had occurred on the 004-0 MMU (12 Right panel). Hale was already at the mine conducting inspection activities. Hale issued a 103(k) order affecting the 12 Right panel and 3 East Mains. Terry Ratliff from the Virginia Department of Mines, Minerals and Energy (VDMME) arrived at the mine as well as Dale Hess, MSHA Vansant Field Office Supervisor. Hale, Hess and Ratliff traveled to the accident site with Consolidation Coal Company officials Kim Noah, Safety Director, Danny Quesenberry, Superintendent - Special Projects, Jack Richardson, Vice President of Central Appalachia Operations, Tim Underwood, Mine Superintendent, and Mike Canada, Manager of Safety. Upon arrival at the accident scene preliminary information was gathered then all individuals left the area. The 103(k) order was left in place and nothing at the accident site was disturbed. A joint accident investigation team consisting of both MSHA and VDMME was established and the accident investigation was scheduled to resume on July 26, 2008. Investigators for MSHA were briefed on the morning of July 26 and MSHA investigators met with VDMME investigators and company officials. All individuals involved in the accident investigation traveled underground to examine and photograph the accident scene and take measurements for a scale drawing.

A total of nine interviews were conducted on July 28 and Sept. 10, 2008. On July 29, 2008, the on-site portion of the investigation was completed, and the 103(k) order was terminated.

DISCUSSION

Accident Site

The mining height in this crosscut averaged 81 inches. The depth of the second cut was 23 feet 10 ¾ inches as measured from the last row of permanent roof support installed in the first cut. Brown and Rocky Meadows commented that the cut looked good, the top was smooth and they did not see any draw rock. The distance from the outby end of the roof bolting machine to the face was 39

feet 5 ¾ inches. The distance from the face to the ATRS of the roof bolting machine was 11 feet 6 inches. Rocky Meadows stated that when the roof bolting machine was moved into position to bolt the 3 Right crosscut no draw rock had fallen and the top looked good when he made a visual check of the area. The roof did not appear loose when the ATRS was pressurized.

Curtis Gibson, Section Foreman, made an examination of the No. 3 heading and 3 Right crosscut at the start of the shift. During this examination, Gibson stated that approximately 5 feet had been taken out of the 3 Right crosscut by the owl shift production crew. Gibson was back in the area two additional times prior to the accident, once conducting an on-shift examination with an inspector and inspector trainee from MSHA and again conducting a pre-shift examination sometime between 12:00 p.m. and 1:00 p.m. The second cut from 3 Right crosscut had not been taken prior to either of these examinations. Gibson stated that he did not observe any unusual or abnormal roof or rib conditions during these examinations.

None of the other miners on the section were in the area of the second cut from 3 Right crosscut prior to the accident.

Roof Strata

An evaluation of roof conditions on the 12 Right panel was made by roof control specialists with MSHA from District 5, Technical Support Roof Division, and VDMME. The immediate roof consists of thinly bedded to finely laminated hard gray shale with overlying sandstone. An evaluation of the roof revealed slickensided surfaces in the area of the accident. The slickensided surfaces intersected the immediate roof at relatively low angles (5 to 15 degrees). The area of roof that fell had a slickensided upper surface.

A stratascope was used to observe the inside of a test hole located at the accident site. The test hole measured 84 inches in depth and was located two rows of roof bolts outby the roof bolting machine in the No. 3 entry. The test hole revealed laminated shale changing to thinly bedded shale from the mine roof to a depth of 42 inches. From 42 to 84 inches the roof was thinly bedded hard gray shale. No cracks were found in the test hole. A total of six test holes were checked with the stratascope. The test holes were located in No. 3 entry at the accident site, No. 4 entry at Survey Station No. 25486, No. 4 entry 33 feet inby Survey Station No. 25491, No. 2 entry at Survey Station No. 25483, No. 2 face area 17 feet inby Survey Station No. 25488 and in the No. 1 entry at Survey Station No. 25484. Slickensided zones were observed at 42 inch depths in the test holes. Slickensided anomalies were also observed in the immediate roof across the

section. Testimony revealed that these anomalies were prone to fall without giving any warning in areas that were not yet bolted.

The section of mine roof that fell at the accident site broke into four pieces. The cavity left by the fallen rock measured 56 inches long, 63 5/8 inches wide and 4 7/8 inches deep. The cavity was 26 inches from the left rib. Two of the pieces of broken rock that fell from this location were found lying on the mine floor. One of these pieces measured 49 inches long, 37 ½ inches wide, 9 inches thick and was found lying 25 inches in front of the left side operator's canopy. The other piece was 40 inches wide, 31 inches long, 9 inches thick and was found lying in front of the ATRS. Two smaller pieces of rock found on top of the operator's canopy came from a smaller cavity that was connected to the larger cavity. No rock was found lying on the victim.

Roof Control

Primary roof support on the 12 Right panel at the time of the accident was 72 inch torque tension roof bolts with 6" X 16" bearing plates. Roof caps or draw rock shields (18" X 18") commonly referred to as "pizza pans", were used in conjunction with the bearing plates to help control draw rock issues. These procedures were required supplements listed in the roof control plan when encountering adverse roof conditions. The approved Roof Control Plan required a maximum bolt spacing pattern of four feet by four feet. Entry width at the location of the accident was approximately 18 feet 9 inches. Roof bolts in the 3 Right crosscut were spaced five and six bolts wide across the width of the entry. Roof bolts at the accident site were installed closer together than required in the approved roof control plan.

Marking of Roof Bolts

This was the second time that the roof bolting crew had been in the 3 Right crosscut that day installing permanent roof support. They had installed two rows of permanent roof support during this bolting cycle. After the second row of permanent roof support was installed, the victim advanced the roof bolting machine to the location where the third row of permanent roof support was to be installed. He pressurized the ATRS against the mine roof and walked to the front operator's canopy. The victim was in the process of marking roof bolt placement at the time of the accident and was positioned between the operator's canopy and the ATRS. The distance between the inby edge of the operator's canopy and ATRS was 41 ¾ inches. The operator's canopy was approximately 20 inches below the mine roof. The Company's Safe Work Instructions (SWI) for "Roof Bolter 5 Position Dual Boom with ATRS" stated "*Measure and mark locations where bolts will be installed according to roof control*

plan." Written company safety precautions for performing this task were as follows *"Sound and vibration check to be completed if visual exam is O.K."* Key points in 5a of the SWI were *"Raise operator's canopy against the roof but do not pressurize as damage could result to canopy or this could result in serious injury."* The Safety Precautions under 5a1 were *"Raise canopies to a safe height that will protect bolter. Do not pressurize against the roof."*

The victim's operator canopy was not raised to a height that would allow the victim to remain underneath the canopy while marking roof bolt locations. Testimony from one miner interviewed revealed that it was easier to mark roof bolt placement when the operator was not underneath the operator's canopy.

Employees assigned to operate equipment are task trained on the equipment and the operator also goes over SWIs for operating the equipment. The SWIs are reviewed with the employees at least annually. Monthly job observations are also performed on each employee every month. The purpose of the monthly job observation is to assure that employees are operating equipment or performing assigned tasks in a safe manner and according to the company SWIs. If employees are observed working in an unsafe manner or not following SWIs, the supervisor performing the job observation is required to stop the employee, point out the unsafe practice and if needed go over the SWI with the employee. The operator failed to recognize that some roof bolting machine operators were not complying with SWI in relation to the raising of the of the operator's canopy after the ATRS has been set and prior to marking roof bolt placement.

Marking locations for roof bolt placement was described in the task outline of the company's SWIs. Section 7(b) under key points for boom positioning stated *"Measure and mark location where bolts will be installed according to Roof Control Plan."* The safety precaution given in section 7(b)(1) was *"Sound and vibration check to be completed if visual exam is ok."* While this was written in the task outline, testimony revealed that some roof bolt machine operators marked roof bolt placement and some did not. This is an indication that while procedures for marking roof bolts were written in the task outline they were not strongly enforced. Individual roof bolting machine operators determined when and how they marked roof bolt placement.

ROOT CAUSE ANALYSIS

An analysis was conducted to identify the underlying causes of the accident that were correctable through reasonable management controls. Listed below are root causes identified during the analysis and the corresponding corrective actions implemented to prevent a recurrence of the accident:

1. Root Cause: Inadequate oversight by management to assure roof bolting machine operators' compliance with established company policies and procedures for safe operation of roof bolting machines.

Corrective action: The revised SWI was reviewed with all roof bolting machine operators prior to their return to work after the fatality. An emphasis has been placed on Job Observations for roof bolting machine operators. A total of 39 Job Observations have been conducted by company personnel on roof bolting machine operators between July 26, 2008 and Oct. 21, 2008, to assure their compliance with the revised SWI. All the observations validated that roof bolting machine operators were complying with the revised SWI.

2. Root Cause: A factor contributing to this accident was the location of the victim and the position of the operator's side operator's canopy at the time of the rock fall.

Corrective action: The approved Roof Control Plan was revised to address positioning of the drill station canopy as follows: *"Upon completion of the loading cycle and with the roof drill operator under permanently supported roof (outby the second row of roof bolts), the ATRS support will be positioned so the T-Bar is no more that 5 feet inby the last full row of roof bolts. The roof support bar will be placed firmly against the mine roof. With the drill operator under permanent support and prior to any miner's presence inby permanent roof support the drill station canopy will be set at or near the mine roof (in abnormal mining heights the canopy will be raised at or near its maximum lift height).*

The operator has revised the SWI where it pertains to marking roof bolt placement. Original verbiage is still in place but the following has been added under safety precautions: *"Note: No one will be allowed to mark roof bolt locations for installation of roof bolts inby the last row of permanent roof bolts."* The operator also revised the SWI for Roof Bolter Key Point 5(a). The Key point was changed from *"Raise operators canopy against the roof but do not pressurize as damage could result to canopy or this could result in serious injury"* to *"Raise operators canopy as close to the roof as possible without coming in contact with the roof."* The Safety Precaution for *5(a)(1) "Raise canopies to a safe height that will protect bolter. Do not pressurize against the roof,"* was changed to *"Raise canopies to a safe height that will protect bolter. Do not pressurize the driller's canopy against the roof, as damage could result to the canopy or this could result in a serious injury."*

CONCLUSION

Elden Todd Meadows, Roof Bolting Machine Operator, was fatally injured when a portion of the mine roof fell while he was marking roof bolt placement in the 3 Right crosscut. The ATRS was pressurized against the mine roof and the operator's canopy was positioned 20 inches from the mine roof. No loose material was observed when the ATRS was pressurized. A visual examination of the area was conducted by the roof bolting machine operators in the area immediately prior to the accident. A slickensided anomaly was present in this working place, but was not detected during this examination. Testimony revealed that these anomalies were prone to fall without giving any warning in areas that were not yet bolted. The victim was positioned between the ATRS and the operator's canopy and this canopy was not raised high enough to protect the victim. The falling rock struck the victim, forcing him into the inby edge of the operator's canopy, resulting in fatal head trauma. There was inadequate oversight by management to assure roof bolting machine operators' compliance with established company policies and procedures for safe operation of roof bolting machines.

Approved:

Ray McKinney
District Manager

2/12/09
Date

ENFORCEMENT ACTIONS

Section 103(k) Order, Order No. 8157268, issued on July 25, 2008, to Consolidation Coal Company, Buchanan Mine #1 stated: *"A fatal accident occurred at this mine on July 25, 2008 at approximately 13:05 hours when the left side roof bolter operator on the 004 MMU was struck by draw rock measuring approximately 4"to 6" thick by 50" wide by 55" long. This order is issued to ensure the safety of any person in 12 Right and 3 East Mains until an examination or investigation is made to determine that the 3 East Mains and 12 Right are safe. Only those persons selected from company officials, state officials and other persons who are deemed by MSHA to have information relevant to the investigation may enter or remain in the affected area. Pre-shift examinations of the affected area may continue."*

The 103(k) was modified once and terminated on July 29, 2008.

APPENDIX A-Persons Participating In the Investigation

The following people provided information and/or were present during the investigation:

Consol Energy, Inc.

John Zachwieja	Vice-President of Coal Operations
Rick Marlowe	Director of Safety Awareness
Michael Canada	Manager of Safety

Consolidation Coal Company, Buchanan Mine #1

Jack Richardson	V.P. Central Appalachia Operations
Bill Meade	General Superintendent
Tim Underwood	Superintendent
Craig Chadwell	Assistant Superintendent
Archie Ruble	Mine Foreman
Kim Noah	Supervisor of Safety
John Teets	Absolute Zero Mentor, Safety
Jeffrey Ball	General Maintenance Foreman, Day Shift
Danny O'Quinn	Transitman, Day Shift
Tommy Taylor	Transitman, Day Shift
Curtis Gibson	Section Foreman, Day Shift
Billy Brown	Faceman, Day Shift
Rick Koeger	Electrician, Day Shift
Thomas Arms	Shuttle Car Operator, Day Shift
William Rasnake	Scoop Operator, Day Shift
Matthew Sutherland	Roof Bolter Operator
Roby Thomas	Continuous Miner Operator
Danny Asbury	Roof Bolter Operator

Mine Safety and Health Administration

Ray McKinney	District Manager, District 5
Nicholas Rasnick	Assistant District Manager, Inspection Division
James Vadnal	Technical Support-Pittsburgh, Roof Control Division
Preston White	Educational Field Services Supervisor
Hagel Campbell	Field Office Supervisor
Daniel Johnson	Conference Litigation Representative
Hubert Payne	Roof Control Supervisor
Brian Keith Ray	Mining Engineer, Ventilation
Gerry Lee Lowe	Mining Engineer, Ventilation

Scott Beverly	Coal Mine Inspector (CMI)
David Smith	Roof Control Specialist
Kevin Cline	Ventilation Specialist

Virginia Department of Mines, Minerals and Energy

Frank Linkous	Chief, Division of Mines
Carroll Green	Mine Inspector Supervisor
Opie S. McKinney	Mine Inspector Supervisor
David Elswick	Technical Specialist Roof Control
Gary Davis	Technical Specialist Electrical
Terry A. Ratliff	Coal Mine Inspector
Rusty Ward	Coal Mine Inspector

APPENDIX B – Victim Information

Accident Investigation Data - Victim Information
Event Number: 4 1 4 7 5 2 2

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. Last Four Digits of SSN:	5. Degree of Injury:
Elden T. Meadows	*M*	*44*	*5376*	*01 Fatal*

6. Date(MM/DD/YY) and Time(24 Hr.) Of Death:	7. Date and Time Started:
a. Date: 07/25/2008 b.Time: 13:05	*a. Date: 07/25/2008 b.Time: 7:00*

8. Regular Job Title:	9. Work Activity when Injured:	10. Was this work activity part of regular job?
014 Roof Bolter (twinhead left side)	*080 Roof Bolter (Marking Bolts)*	Yes X No

11. Experience	Years	Weeks	Days		Years	Weeks	Days		Years	Weeks	Days		Years	Weeks	Days
a. This Work Activity:	*7*	*17*	*0*	b. Regular Job Title:	*7*	*17*	*0*	c: This Mine:	*7*	*27*	*0*	d. Total Mining:	*22*	*16*	*0*

12. What Directly Inflicted Injury or Illness?	13. Nature of Injury or Illness:
090 Caving Rock (Rock falling from roof)	*350 Cerebral Hemorrage-blunt trauma to head*

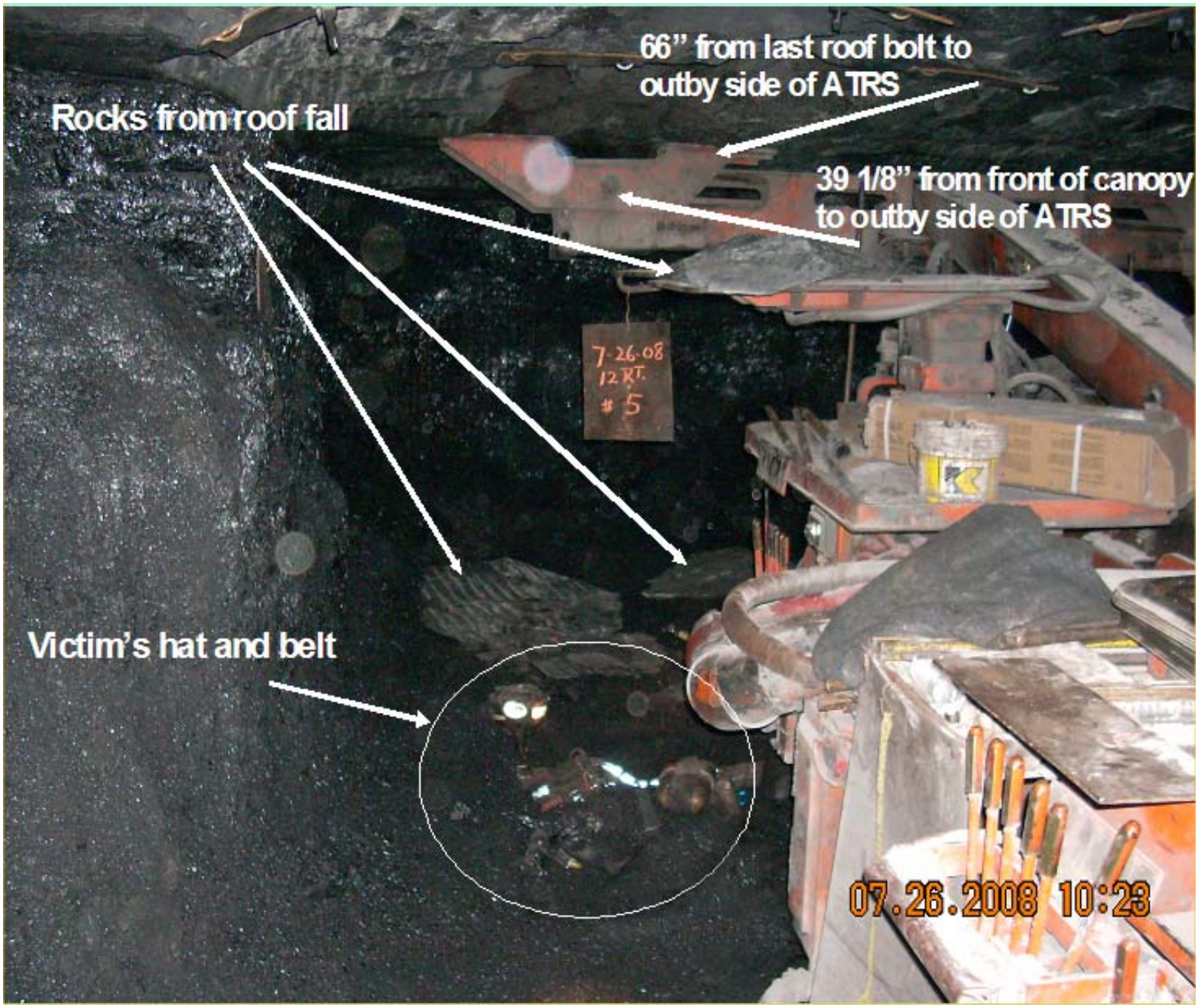
14. Training Deficiencies:
Hazard: | | New/Newly-Employed Experienced Miner: | | Annual: | | Task: | |

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

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

17. Part 50 Document Control Number: (form 7000-1) *220082180074* 18. Union Affiliation of Victim: *9999* *None (No Union Affiliation)*

APPENDIX C – Photographs

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APPENDIX D – SKETCH