

UNITED STATES
DEPARTMENT OF LABOR
MINE SAFETY AND HEALTH ADMINISTRATION

COAL MINE SAFETY AND HEALTH

REPORT OF INVESTIGATION

Underground Coal Mine

Fatal Electrical Accident
August 20, 2014

Buchanan Mine #1
CONSOL Buchanan Mining Company, LLC
Mavisdale, Buchanan County, Virginia
ID No. 44-04856

Lead Accident Investigator

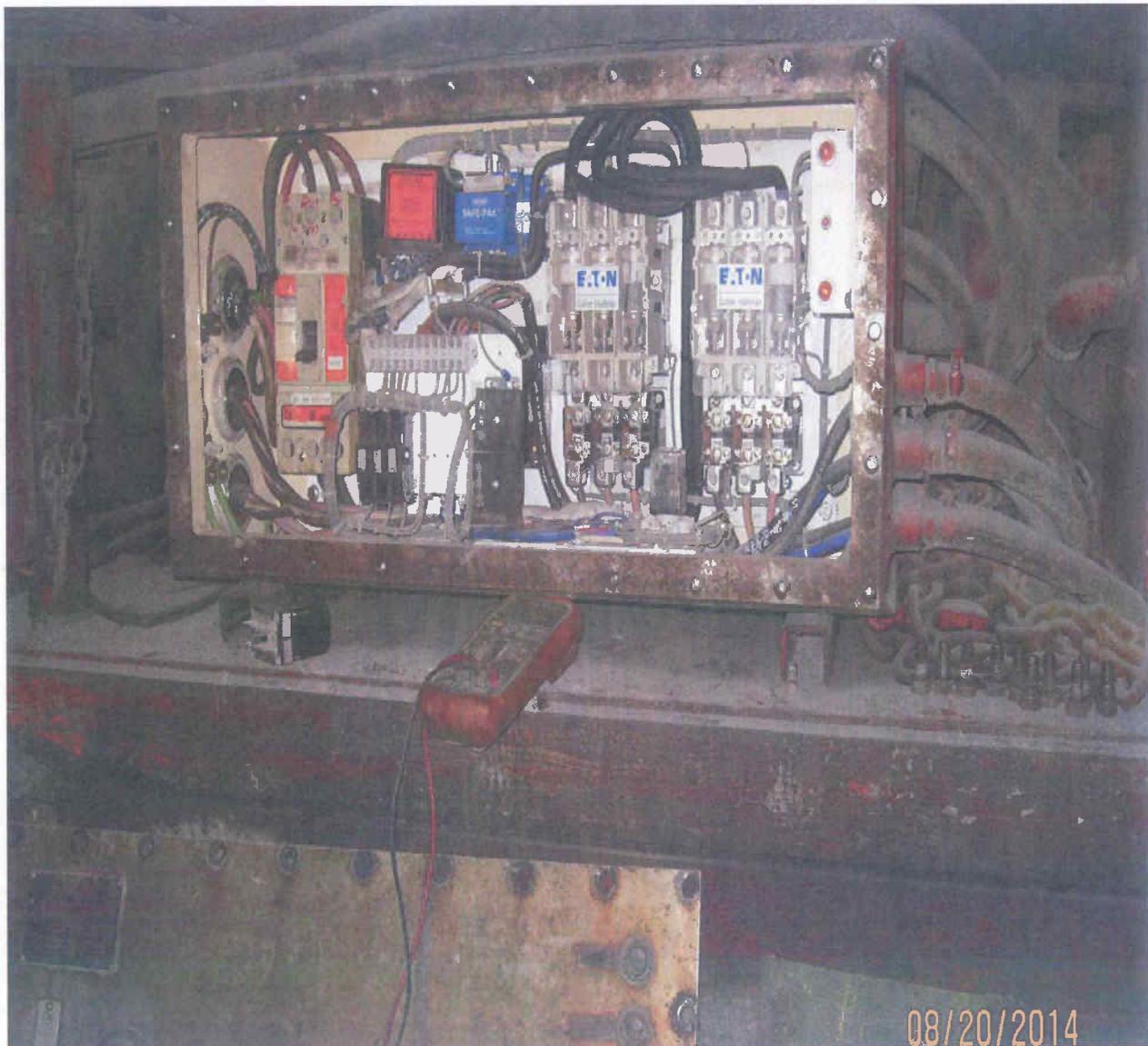
Dennis A. Shortt
Electrical Specialist

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

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Photograph No. 1 - Explosion Proof Enclosure



OVERVIEW

At approximately 10:25 a.m. on Wednesday, August 20, 2014, Michael J. Justice (Victim), age 41, was fatally injured while working underground at the mine. The victim was working inside the explosion proof enclosure of a 600 volt alternating current (VAC) roof bolting machine. The victim came in contact with one phase lead of the 600 VAC circuit and was electrocuted.

Through interviews and evidence gathered at the scene of the accident, it is believed the victim was working on the energized roof bolting machine's intrinsically safe (IS) control relay at the time of the accident. It is believed that he was putting the relay

retainer bands (two O-rings) on the relay at the time of the accident. The root cause of the accident was failure to comply with provisions of 30 CFR § 75.511, which requires visual disconnecting devices to be locked out and suitably tagged by the persons who perform electrical work.

GENERAL INFORMATION

CONSOL Buchanan Mining Company, LLC, Buchanan Mine #1 is an underground coal mine located two miles south of Route 460, adjacent to State Route 632, at Mavisdale, Buchanan County, Virginia. CONSOL Energy Inc., located in Pittsburgh, Pennsylvania, is the parent company of CONSOL Buchanan Mining Company, LLC. The principal officers for the mine at the time of the accident were:

Brett Holbrook
Danny Atwell
Jon Hale
Ray Kinder

V.P. Central Appalachian Operations
General Superintendent
Assistant Superintendent
Mine Foreman

The mine has 12 shaft openings into the Pocahontas No. 3 Seam. The seam averages 6 feet in height. Four fans exhausting 2.4 million cubic feet of air per minute provide ventilation. Laboratory analysis of return air samples shows a methane liberation rate of 9.3 million cubic feet per day through the main mine fans. The development units are ventilated using a split system with exhausting line curtains or auxiliary fans and ventilation tubing.

The mine employs a total of 402 underground and 65 surface miners working three shifts per day, two production shifts and a maintenance shift, five days per week. The evening shift is designated as a maintenance shift. The mine produces an average of 17,600 tons of raw material daily from six continuous mining machine units and one longwall unit. Six continuous mining machine Mechanized Mining Units (MMUs) comprise three super sections where two units operate side-by-side and dump coal at the same section loading point. Coal is transported from the faces by battery-powered ram cars, freedom cars (battery-powered shuttle cars), and a longwall face conveyor. The coal is then transported to the production shaft bottom by belt conveyors, stored in underground bunkers, and hoisted to the surface by skip hoist cars. Employees and materials are transported in and out of the mine via man hoists and underground travel is facilitated by a diesel-powered track haulage system.

The super sections support longwall mining. Longwall panels are developed 750 feet wide by 11,500 feet long. At the time of the accident, mining was ongoing on the 3 super sections and the longwall.

Prior to the accident, the Mine Safety and Health Administration (MSHA) completed the last regular health and safety inspection of the mine on June 26, 2014. A regular safety and health inspection started on July 1, 2014, and was ongoing at the time of the accident. The Non-Fatal Days Lost (NFDL) injury incidence rate for the mine in 2013 was 0.56 compared to a National NFDL rate of 3.28 for mines of this type.

DESCRIPTION OF THE ACCIDENT

On August 20, 2014, the mine was conducting normal mining operations. Coal production started on the 24 Right super section (013 and 014 MMUs) on the midnight shift and continued into the day shift. The 24 Right day shift crew arrived on the section at approximately 8:20 a.m. Rick Koger, Section Electrician, started his daily routine of placing calibration gas on the methane monitor for the right side continuous mining machine. Koger then went to the right side roof bolting machine located in the No. 3 entry inby survey station No. 31596 to test the methane sensors on the roof bolting machine. The roof bolting machines at this mine are equipped with a methane monitor that has dual sensors; one sensor is located underneath each operator's drill canopy. According to Koger, both the right side continuous mining machine and the right side roof bolting machine functioned properly when calibration gas was applied to the methane monitor sensors. After he completed the checks on the roof bolting machine, Koger started to walk away. One of the roof bolting machine operators called for him to come back. Koger was told that the roof bolting machine would not start. Koger started troubleshooting the roof bolting machine. Koger stated that he took the cover off the largest explosion proof enclosure (see Appendix A) on the roof bolting machine in order to troubleshoot the electrical circuits. Koger found a blown fuse and a broken resistor wire. He determined that the blown fuse and broken resistor wire did not correct the startup problem. At no time did Koger or anyone else deenergize the power for this roof bolting machine at the power center.

Some outby maintenance supervisors are also assigned to oversee a mining section as part of their normal duties. Those maintenance supervisors travel to the sections on a regular basis to assist the section electricians. Justice, a Maintenance Supervisor, was assigned to the 24 Right section (see Appendix B). On the day of the accident, Justice traveled to the section as part of his normal duties. Justice entered the mine at approximately 7:52 a.m. He walked to the maintenance area and traveled by diesel powered man bus (track) to the 24 Right section. Justice arrived on the section at approximately 9:20 a.m. When Justice arrived on the section, he learned that the roof bolting machine was not operating. Justice traveled the No. 3 entry to the right side roof bolting machine to assist Koger with troubleshooting and electrical work on the roof bolting machine. Koger told Justice what he had done and they both discussed the next steps to be taken. Justice then directed Koger to get an IS relay from the parts sled for the emergency stop circuit.

At this time, Justice performed electrical work, instead of troubleshooting, when the IS relay was removed and a new relay was installed. After replacing the IS relay, it was determined that the relay was not the problem. Justice instructed Koger to go to the methane monitor power supply and open the electrical enclosure for further troubleshooting. The methane monitor power supply electrical enclosure was located in the center toward the front of the walk-through roof bolting machine. At some point, Justice placed the circuit breaker, which was inside the largest explosion proof enclosure of the roof bolting machine, in the "off" position and replaced the IS relay with the original relay he had taken out earlier (see Appendix C).

It is believed that Justice was trying to put the relay retainer bands in place when he came into contact with the loose strands of the red phase lead or the connection lug on the line side of the breaker. This contact put 346 VAC from the tip of his left hand ring finger through his body to ground. The 346 VAC is the phase-to-ground voltage of a 600 VAC three-phase circuit.

Koger walked to the methane monitor power supply and was preparing to remove the cover of the electrical enclosure. He heard Justice make a noise. Koger stated he turned and ran out of the walkway to the back of the roof bolting machine and observed that Justice appeared to be in contact with an energized electrical circuit. According to Koger, Justice was on his knees and appeared to have both hands inside the panel board of the roof bolting machine. Koger ran to Justice and kicked him, to knock him away from the energized circuit of the roof bolting machine. Koger stated that when kicked, Justice was not knocked away from the machine, but Koger believed that Justice had been freed from the energized circuit. Koger then grabbed Justice by the shoulders and pulled him to the ground. Koger stated that he did not feel an electrical shock when he grabbed Justice.

Greg Burress, Roof Bolting Machine Operator, was also near the roof bolting machine when the accident happened. Burress yelled for help. Terry Hamilton, Section Foreman, and Luke Stull, Geologist, were located just outby the roof bolting machine in the intersection and heard Burress. Hamilton came to the accident scene and started first aid. Tim LaForce, Continuous Miner Coordinator, was notified of the accident by Stull, and they arrived at the scene shortly after Hamilton. Burress left to get first aid supplies. Todd Keen, Roof Bolting Machine Operator, went to the mine phone to request an ambulance. On his way back to the accident scene, Keen met Roby Thomas, Left Side Continuous Mining Machine Operator, with the Automatic External Defibrillator (AED). Keen took the AED to the accident scene. While first aid was being rendered, the AED was placed on Justice. The AED recommended one shock, which was given. The AED did not recommend any further shocks. Jackie Horn, Right Side Continuous Mining Machine Operator, Burress, LaForce, and Keen continued administering first aid. Daniel Smith, Roof Bolting Machine Operator, went to obtain track clearance and prepare a man bus to transport the victim to the surface. LaForce

instructed Hamilton to go to the mine phone at the power center, notify management, and make sure the track was clear from the 24 Right section to the Horn Mountain shaft bottom. Hamilton met Anthony Cook, Scoop Operator, and directed him to make sure the roadway between the No. 3 entry and the supply hole was clear and to take the scoop to the No. 3 entry where the victim was located. Justice was secured on a backboard, loaded into the bucket of the scoop, and transported to the man bus. Justice was then transported on the man bus to the Horn Mountain shaft bottom. LaForce, Keen, Burrell, and Horn continued performing CPR on the victim during transport while Smith operated the man bus.

Mercy Ambulance Service was notified of the accident at approximately 10:29 a.m. The ambulance arrived at the mine site at approximately 10:55 a.m. At approximately 11:20 a.m., the man trip arrived on the shaft bottom with Justice and the EMTs from the ambulance service took over resuscitation efforts. They continued CPR and transferred Justice to the top of the shaft and into the ambulance. They left the mine at approximately 11:53 a.m. and transported Justice to Clinch Valley Medical Center, Richlands, Virginia, arriving at approximately 12:16 p.m. The emergency room physician, Dr. Ben Kerny, pronounced Michael Justice dead at 12:29 p.m.

INVESTIGATION OF THE ACCIDENT

On August 20, 2014, at 11:03 a.m., Quintin Justice, Mine Engineer, called the MSHA toll free number to inform MSHA of the accident. A citation was issued because MSHA was not notified immediately, at once, without delay, and within 15 minutes.

Personnel from the MSHA Hotline contacted Scott Beverly, Supervisory Coal Mine Safety and Health Inspector, at 11:10 a.m. A copy of the MSHA Escalation Report was sent to Beverly. Information concerning the accident was gathered and an accident investigation team was assembled. The team consisted of Dennis Shortt, Coal Mine Safety and Health Inspector (Electrical Specialist); Mark Deel, Coal Mine Safety and Health Inspector (Health Specialist); and Jason Hess, Coal Mine Safety and Health Inspector (Ventilation Specialist). Shortt was designated the lead accident investigator.

Cornelius Simmons, Coal Mine Safety and Health Inspector and Shortt were underground at the Buchanan Mine when the accident occurred. Shortt was located at 23 Right longwall belt drive area and Simmons was on the 25 Right section. Simmons traveled to the 24 Right section and assisted with the investigation.

James Kiser, Assistant District Manager; Delmer Hess, Supervisory Coal Mine Safety and Health Inspector; Michael Colley, Supervisory Coal Mine Safety and Health Inspector, along with Simmons, were located on the 25 Right section at the time of the accident. D. Hess was informed by Ray Kinder, Mine Foreman that a miner was found unresponsive on 24 Right section. D. Hess directed Danny Atwell, Mine Superintendent, to locate Shortt and have Shortt meet D. Hess at the mouth of 24 Right.

Atwell called Eric Vandyke, Maintenance Supervisor, who was traveling with Shortt, and informed Shortt that there had been an accident and requested Shortt meet D. Hess at the mouth of 24 Right section. At 11:00 a.m., Shortt issued a 103(k) order verbally to Ray Kinder, Mine Foreman. The order was issued to ensure the health and safety of persons in the affected areas of the mine until the accident investigation could be completed. J. Hess arrived at the mine and traveled underground to the accident scene with personnel from the Virginia Department of Mines, Minerals and Energy (DMME).

Officials from CONSOL Buchanan Mining Company LLC, DMME, and MSHA participated in the accident investigation at the mine (see Appendix D). On August 20 and 25, 2014, the investigation team collected information, examined the accident scene, and took photographs of the affected area. The accident investigation team obtained the circuit breaker associated with the fatal accident to examine and test it under laboratory conditions. Fred Martin, Educational Field Services (EFS) examined the victim's training records.

MSHA and DMME conducted joint interviews with 15 miners on August 21 and 22, 2014, at the CONSOL office located at Oakwood, Virginia. Those persons interviewed are listed in Appendix D.

DISCUSSION

Physical Factors

The accident occurred in the No. 3 heading approximately 127 feet inby survey station No. 31596 on the 24 Right section off 3 East Mains, 014-0 MMU. The section consisted of 4 entries. Entries No. 2 and 3 provide intake air to ventilate the section. Entries No. 1 and No. 4 are used for air returning from the section.

The section, including the area around the accident site was dry to damp. The accident site was relatively flat and level with a roof height of approximately 7.8 feet. The roof and ribs in this area were generally smooth.

The victim's work gloves were located on top of the area light at the operator's deck of the roof bolting machine. The Fluke multimeter located at the accident scene belonged to Koger. The multimeter was set on "Ohms" to measure resistance, and was not being used at the time of the accident. A Fluke non-contact voltage tester was also located at the scene.

During the investigation, it was determined that the roof bolting machine's onboard circuit breaker had wiring deficiencies. The connection of the red phase lead (closest to the IS relay) to the line side of the circuit breaker had several strands of copper wire protruding out of the connection lug and one strand of the wire protruding toward the IS control relay on which the victim was working. The IS relay was located

approximately 1½ inches from the copper strand. Also, the white phase lead (farthest from the IS relay) was not properly installed in the connection lug. There were strands of wire protruding around the connection lug and the lead was loose in the lug which caused heating and damage to the insulation (See photographs in the Appendices).

It is believed that Justice was trying to put the relay retainer bands in place when he contacted the energized circuit because this was the next step in the process of installing the IS relay. These bands were very close to the energized circuit, and this was what the victim was working on according to Koger and evidence at the scene of the accident.

When the new circuit breaker was installed, approximately 7 to 10 inches of the white phase lead had to be removed in order to access the portion of the lead that was not damaged by heating. The protruding wire strands of the red phase lead were one possible contact point. The autopsy indicated two thermal injuries to the tip of the ring finger of Justice's left hand - a 2 centimeter blister and one 0.9 centimeter blister.

The investigation further determined that the original cause of the electrical problem was a defective panic strip located at the left side of the roof bolting machine operator's position. MSHA electrical specialist, Lincous Gary Perkins, oversaw the post-accident troubleshooting and repair.

Troubleshooting and Electrical Work

Troubleshooting or testing is the process of locating electrical problems and verifying that proper repairs have been made. In contrast, electrical work is installing, repairing, or replacing electrical equipment, components, or conductors. Electrical work requires the electrician to first perform lock out and tag out procedures.

Justice began troubleshooting and reportedly thought that the IS relay was defective. According to interviews, the victim removed the original IS relay and installed a replacement IS relay. He then removed the replacement IS relay and installed the original IS relay. It is believed that when the accident occurred, the victim had just re-installed the original IS relay and was attempting to place the relay retainer bands over the IS relay and continue with the troubleshooting process.

Before the victim secured the IS relay in place, by placing the relay retainer bands over the IS relay, he should have traveled to the section power center (located approximately 563 feet outby the roof bolting machine in the No. 3 entry), de-energized the circuit breaker, removed the cable coupler or plug from the receptacle on the power center to establish visually that the circuit was de-energized and disconnected, and locked out and tagged out the visual disconnect (cable coupler). When the victim broke the plane of the explosion proof enclosure for the purpose of securing the IS relay, he was no longer troubleshooting but was doing electrical work.

Each time the victim broke the plane of the explosion proof enclosure to replace the IS relay, he should have first de-energized the circuit breaker, removed the cable coupler, and locked out and tagged out the cable coupler at the section power center prior to doing this electrical work. He should have repeated this process each time he removed and replaced the IS relay.

Equipment

The roof bolting machine involved in the accident was manufactured by J.H. Fletcher & Co., type DDR-15-A, serial number 2009101, with MSHA Approval No. 2G-2956A-6. The nominal input voltage to the roof bolting machine is 600 volts, 3-phase, and 60 hertz. A No. 2 American Wire Gage (AWG) trailing cable was used to supply power to the walk thru roof bolting machine. During operation, the roof bolting machine utilizes a cable reel to spool cable on and off the roof bolting machine. The roof bolting machine is equipped with metal track-type crawlers to move. The explosion proof box cover, which covers the electrical components in the box, is 16 ½ inches tall and located on the right side (off side) with the bottom approximately 22 inches above the mine floor. The original equipment manufacturer provides a 250 amp circuit breaker with a trip range of 500 to 1,000 amps. The circuit breaker that was in the roof bolting machine at the time of the accident was a 250 amp circuit breaker with a trip range of 875 to 1,750 amps. The IS relay being worked on by the victim was located approximately 36 inches above the mine floor.

Testing

Examination of the onboard circuit breaker was conducted on September 16 and September 17, 2014, at the MSHA Approval and Certification Center (A&CC) in Triadelphia, West Virginia. The examination of the circuit breaker did verify eight deficiencies; however, none of the deficiencies found indicated that the circuit breaker contributed to the accident. The examination verified that there were several conductor strands of #26 AWG that were not captured in the terminal lug closest to the IS control relay on which the victim was working.

Mine Examinations

The pre-shift and on-shift records for the 24 Right section (013 and 014 MMUs) were found to be up-to-date. No significant entries were recorded for the midnight shift pre-shift examination on the day of the accident related to the accident scene.

The last weekly electrical examination record for the right roof bolting machine was up-to-date. The "Examination of Electrical Equipment" record book showed the right roof bolting machine was last examined on August 19, 2014. The record book lists a Hazardous Condition of "Place in cable needed additional tape." The Action Taken for correction showed "Taped."

Experience and Training

Michael Justice was hired on July 26, 2010 and received experienced miner training at Buchanan Mine #1 on August 2, 2010. He had nineteen years, three weeks, and four days of mining experience. He had four years, two weeks and four days with CONSOL Buchanan Mining Company, LLC, and two years, fifteen weeks as a Maintenance Supervisor at the mine. Justice's training was current and he was properly certified by the DMME and qualified by MSHA to perform duties as an underground electrician. He completed Underground Electrical Repairmen retraining on September 30, 2013. In addition to the required training, CONSOL Buchanan Mining Company, LLC had a program in place at the time of the accident to evaluate electricians on their skill and knowledge of regulations, including "Lock and Tag Out." The victim had a Certificate of Task Training and Observation Form completed for a "Full Cycle Observation" on June 2, 2014, for "Lock and Tag Out." Company records show at least 21 different Certificates of Task Training and Observation Forms had been completed for him since he was hired for "Lock and Tag Out."

In 2014, Justice trained three electricians in proper lock and tag out procedures, and observed the lock and tag out practices of these electricians. Koger was one of these electricians. Training and Observation forms were completed for these sessions.

Before the fatal accident, the company did not have a written policy clearly defining the difference between performing electrical troubleshooting and performing electrical work. The company has since modified its training program to clearly define the difference between electrical troubleshooting and electrical work.

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.

Listed below is the root cause identified during the analysis and the corresponding corrective action implemented to prevent a recurrence of the accident:

Root Cause: The mine operator failed to follow well established and well known safe electrical work requirements. Additionally, the mine operator's programs, policies and procedures were not sufficient to prevent miners from working on energized electrical equipment without first locking and tagging out the equipment before electrical work is started.

Corrective Action: The mine operator modified its training program to clearly define the difference between performing electrical troubleshooting and performing electrical work. All miners were retrained on the differences between performing troubleshooting and electrical work. Troubleshooting training included glove requirements at specific voltages. Electrical work training included lock out, tag out procedures. The mine's Part 48 training program was revised to include specific training of the items above in the Task Training section.

In addition, a managerial oversight program was implemented by the mine operator to ensure that the mine operator's policies, procedures and programs are followed by the miners.

CONCLUSION

The victim did not de-energize, lock out, and tag out the visual disconnecting device on an electrical circuit prior to performing electrical work on that circuit. The non-workmanlike and deficient installation of the conductors on the circuit breaker may have been an indirect cause of the accident. The victim was performing electrical work inside the energized explosion proof enclosure when he came in contact with either the line side connection lug for the red phase lead to the circuit breaker or with strand(s) of No. 2 AWG wires protruding from that connection lug. The company's programs, policies, and procedures that were in place at the time of the accident failed to prevent this accident.

Approved:

Clayton E. Sparks

Clayton Sparks
District Manager

2/18/2015

Date

ENFORCEMENT ACTIONS

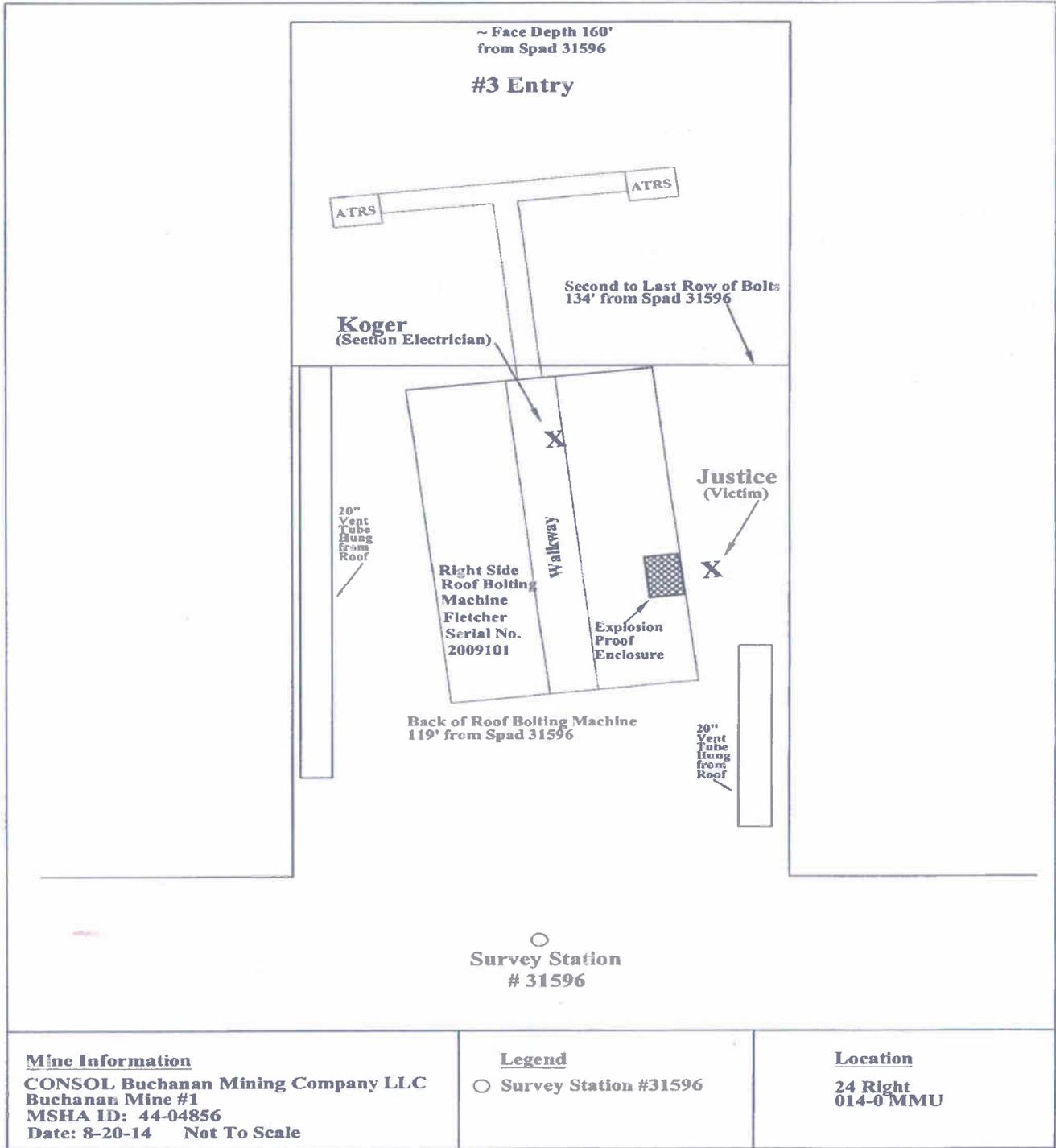
- 1) Section 103(k) Order No. 8204341 issued August 20, 2014, to Consol Buchanan Mining Company, LLC, Buchanan #1 Mine: A Fatal accident occurred at this operation on August 20, 2014 at approximately 1045 a.m. This order is being issued, under Section 103(k) of the Federal Mine Safety and Health Act of 1977, to prevent the destruction of any evidence which would assist in investigating the cause or causes of the accident. It prohibits all activity in by the 24 Right Section Power Center until MSHA has determined that it is safe to resume normal mining operations in this area.

The Section 103(k) order was modified 6 times during the investigation.

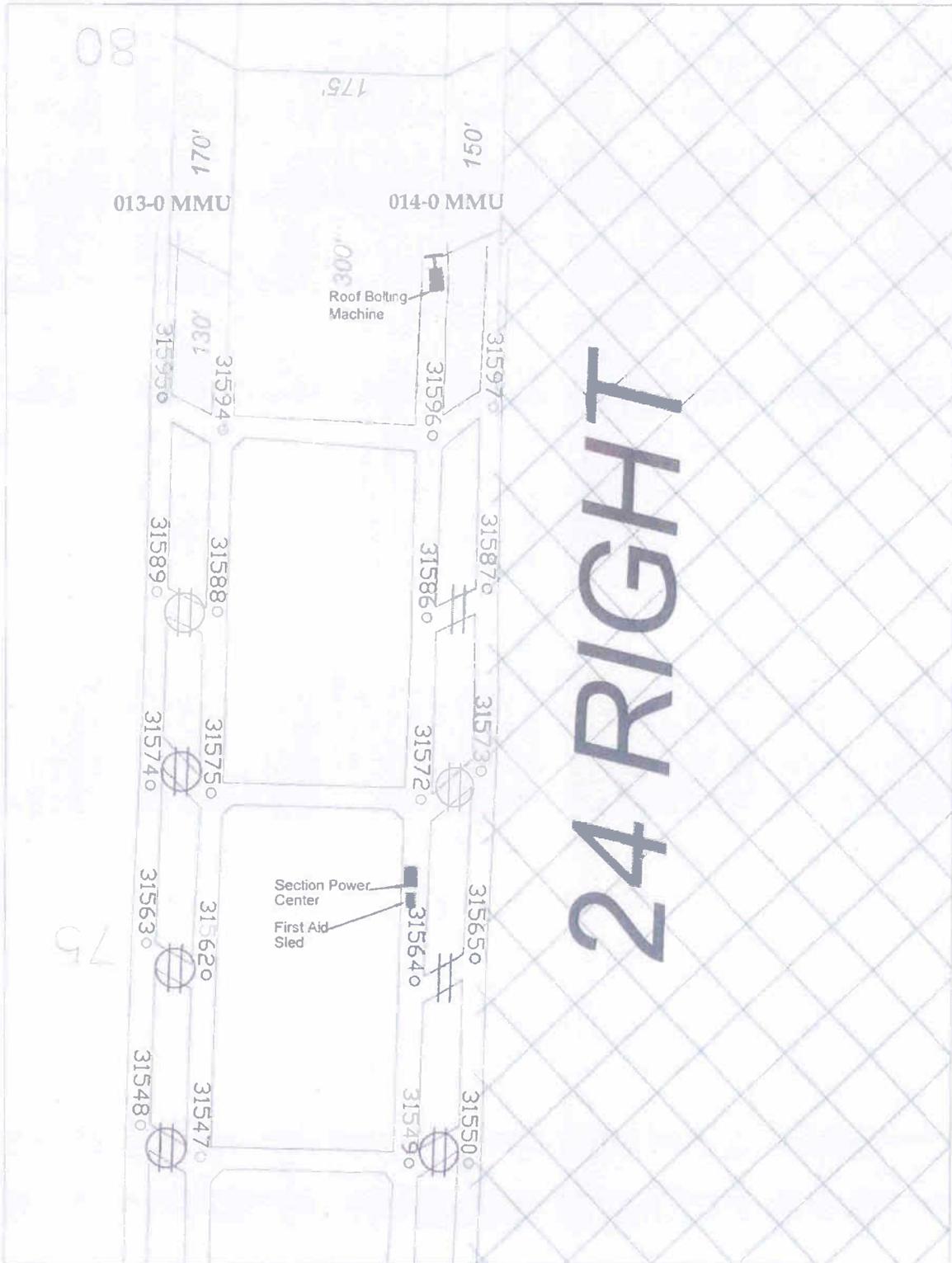
- 2) A 104(d)(1) Citation, No. 8204342, was issued for a violation of 30 CFR § 75.511. A fatal accident occurred at this mine on August 20, 2014. A Maintenance Supervisor, who was a qualified electrician, was electrocuted while working inside an energized 600 VAC roof bolting machine explosion proof enclosure. The Fletcher walk thru roof bolting machine, Model No. DDR-15-A, S/N 2009101 was located on the 24 Right section. The Maintenance Supervisor was in the process of replacing the intrinsically safe (IS) relay and retaining bands when he came in contact with at least one phase of the energized three phase circuit.

The operator failed to ensure that the equipment was de-energized, that the cable coupler was removed, and that the circuit was locked out and tagged out prior to installing, repairing or replacing electrical equipment, components, or conductors. The mine operator engaged in aggravated conduct when the maintenance supervisor worked on the energized circuit without de-energizing, removing the cable coupler, and locking and tagging out the cable coupler. This violation is an unwarrantable failure to comply with a mandatory standard.

APPENDIX A - Drawing of Roof Bolting Machine in #3 Entry



APPENDIX B - Section Map

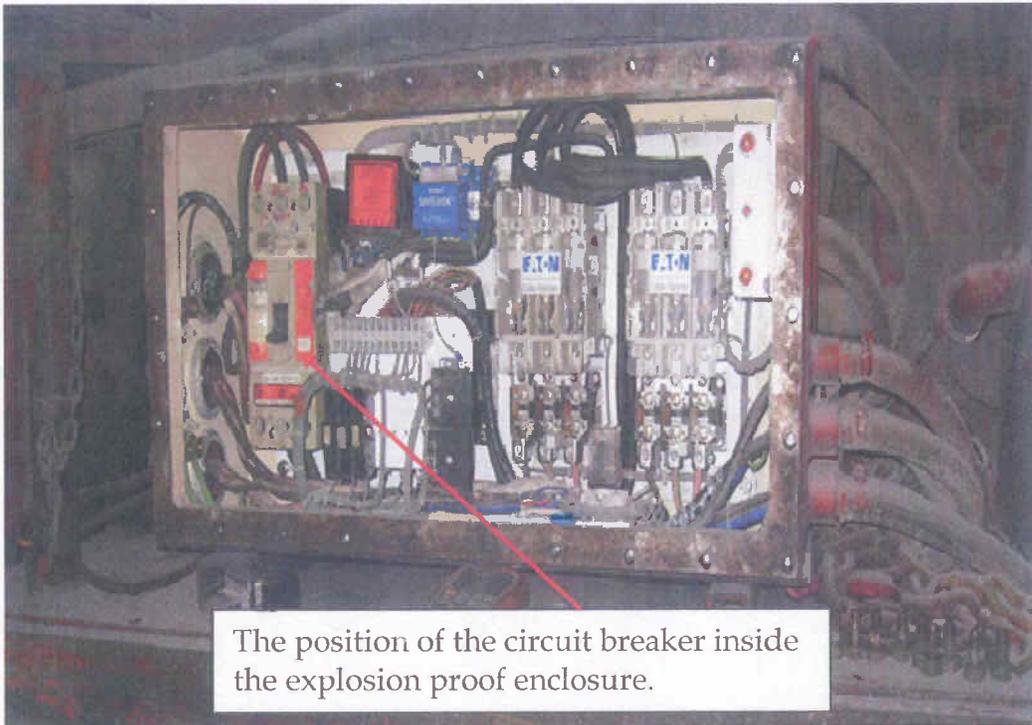


Mine Information
 CONSOL Buchanan Mining Company LLC
 Buchanan Mine #1
 MSHA ID: 44-04856
 Date: 8-20-14 Not To Scale

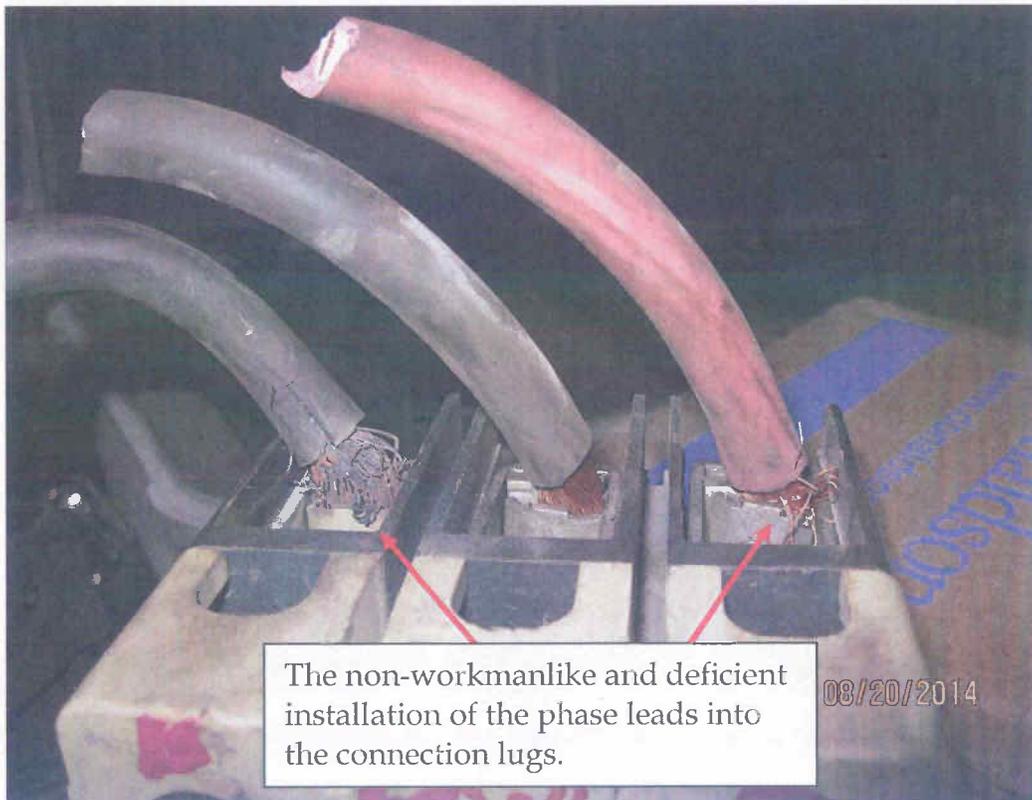
Legend
 ○ Survey Station

Location
 24 Right
 014-0 MMU

APPENDIX C - Photographs of Circuit Breaker



The position of the circuit breaker inside the explosion proof enclosure.



The non-workmanlike and deficient installation of the phase leads into the connection lugs.

08/20/2014

APPENDIX D - Persons Participating in the Investigation

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

CONSOL Buchanan Mining Company LLC

Brett Holbrook	V.P. Central Appalachia Operations
Danny Atwell	General Superintendent
Jon Hale	Assistant Superintendent
Ray Kinder	Mine Foreman
Keith Sigmon	Assistant Mine Foreman
Sam Beavers	Manager of Maintenance Central Appalachia Operations
Jeff Ball	Assistant Superintendent of Maintenance
Matt Johnson	Maintenance Foreman
Darrell Johnson	Safety Department
Richard Perkins	Safety Department
Rick Marlow	Director of Safety Awareness
Billy Shelton	CONSOL Energy CONSOL Attorney

Virginia Department of Mines, Minerals and Energy (DMME)

Chris Whitt	Emergency Manager
Gary Davis	Electrical Specialist
Tim E. Lyall	Mine Inspector
Clarence Begley	Mine Inspector
Wayne Davis	Ventilation Specialist
Rusty Ward	Mine Inspector
Hershel Hayden	Mine Inspector
Ken Johnson	Family Liaison

Mine Safety and Health Administration (MSHA)

James A. Kiser	Assistant District Manager (Enforcement)
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Delmer Hess	Supervisory Coal Mine Safety and Health Inspector
Michael B. Colley	Supervisory Coal Mine Safety and Health Inspector
Terry Sheffield	Staff Assistant
Dennis A. Shortt	Electrical Specialist
Jason Lane	Supervisory Electrical Engineer
Lloyd Robinette, Jr.	Family Liaison
Fred Martin	Educational Field Services
Mark Deel	Coal Mine Safety and Health Inspector
Jason Hess	Coal Mine Safety and Health Inspector

Persons interviewed During the Investigation

Terry Hamilton	Section Foreman
Rick Koger	Section Electrician
Greg Burress	Roof Bolter (Right Side)
Luke Stull	Geologist
Tim LaForce	Continuous Miner Coordinator
Jackie Horne	Continuous Miner Operator
Chadwick Graham	Outby Electrician
Roby Thomas	Continuous Miner Operator
Derrick Pridgen	Roof Bolter (Right Side)
Todd Keene	Roof Bolter (Left Side)
Daniel Smith	Roof Bolter (Left Side)
Randal Fuller	Freedom Car Operator
Brian Johnson	Freedom Car Operator
Anthony Cook	Scoop Operator
Jeff Ball	Assistant Superintendent of Maintenance

APPENDIX E - Victim Information

Accident Investigation Data - Victim Information

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



Event Number: 4 4 1 2 9 7 6

Victim Information: 1

1. Name of Injured/Ill Employee: <i>Michael J. Justice</i>		2. Sex: <i>M</i>	3. Victim's Age: <i>41</i>	4. Degree of Injury: <i>01 Fatal</i>												
5. Date(MM/DD/YY) and Time(24 Hr.) Of Death: <i>a. Date: 08/20/2014 b. Time: 12:29</i>				6. Date and Time Started: <i>a. Date: 08/20/2014 b. Time: 7:30</i>												
7. Regular Job Title: <i>049 Maintenance Supervisor</i>			8. Work Activity when Injured: <i>020 Trouble Shooting</i>			9. Was this work activity part of regular job? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>										
10. Experience		Years	Weeks	Days	b. Regular		Years	Weeks	Days	c. This		Years	Weeks	Days	d. Total	
Work Activity:		<i>2</i>	<i>15</i>	<i>0</i>	Job Title:		<i>2</i>	<i>15</i>	<i>0</i>	Mine:		<i>4</i>	<i>2</i>	<i>4</i>	Mining: <i>19</i> <i>3</i> <i>4</i>	
11. What Directly Inflicted Injury or Illness? <i>042 contacted 1 phase of 600 VAC</i>				12. Nature of Injury or Illness: <i>210 Electrocution</i>												
13. Training Deficiencies:																
Hazard:		New/Newly-Employed Experienced Miner:			Annual:		Task:									
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:		First-Aid:		CPR:		EMT:		Medical Professional:		None:						
		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>										
16. Part 50 Document Control Number: (form 7000-1)				17. Union Affiliation of Victim:												