
WEST VIRGINIA OFFICE of MINERS' HEALTH, SAFETY and TRAINING

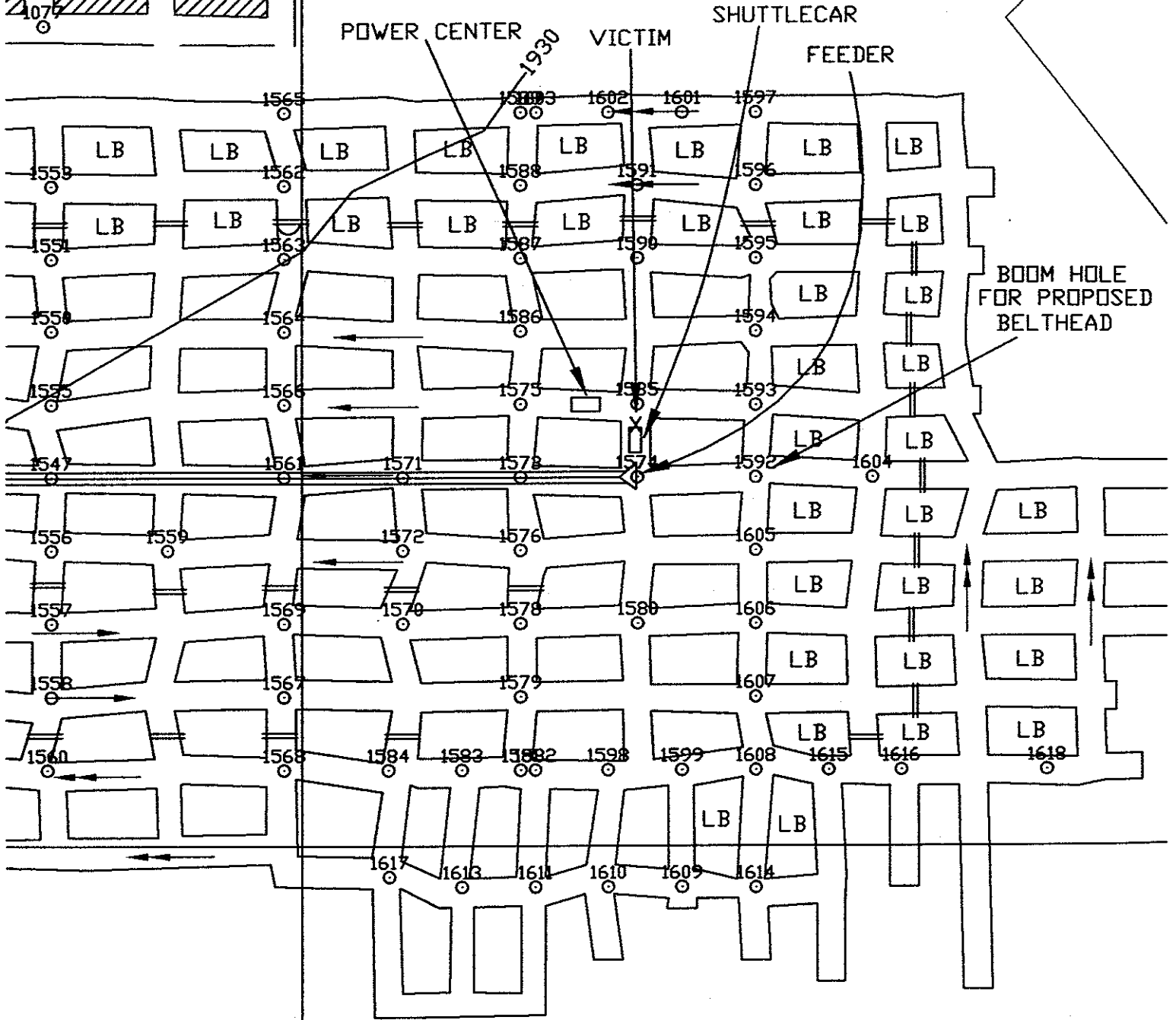
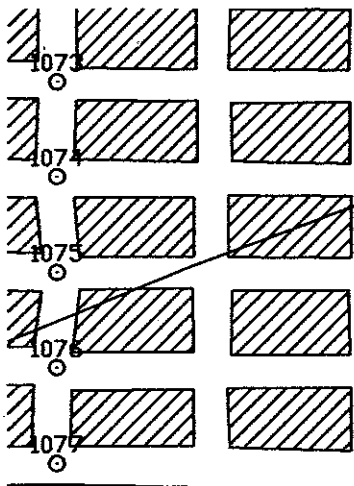
March 23, 2003

Fatal Electrical Accident Investigation Report
Energy Plus, Inc.
No. 50 Mine Permit No. U-4016-93D

Region Two – Welch Office
891 Stewart Street
Welch, WV 24801
Fred B. Stinson, Inspector-at-Large

TABLE OF CONTENTS

SKETCHES.....	iii
GENERAL INFORMATION	1
DESCRIPTION	2,3
FINDINGS OF FACT.....	3,4,5,6
CONCLUSION	6
ENFORCEMENT ACTION	6
RECOMMENDATIONS	7
ADDITIONAL STATEMENT	7
ACKNOWLEDGMENT & SIGNATURES.....	7
APPENDIX.....	8
MINE INFORMATION.....	9
VICTIM INFORMATION.....	10
SUPPLEMENTAL INFORMATION	11
INVESTIGATION.....	11,12,13



ENERGY PLUS, INC.
 NO. 50 MINE
 U-4016-93
 46-08776
 SCALE: 1"=100'

Fatal Electrical Accident Investigation Report
Energy Plus, Inc.
No. 50 Mine
Permit No. U-4016-93D

GENERAL INFORMATION

On March 23, 2003, at approximately 4:30 a.m., Mr. Ronald D. Williams, a 51 year old section foreman from Welch, West Virginia, sustained serious burn injuries from a 480-volt AC receptacle located on the section power center. Mr. Williams utilized the 480-volt AC, 3-phase resistance grounded, 225-amp receptacle on the section power center to shoot (detonate a shot) a boom-hole. This resulted in an electrical fault that produced intense heat generated by a flash fire and electrical arcing. The accident occurred at the Energy Plus, Inc., No. 50 Mine, (U-4016-93D) located near Kimball, West Virginia. Mr. Williams eventually passed away on April 10, 2003, at the Western Pennsylvania Burn Center located in Pittsburgh, Pennsylvania. Mr. Williams had a total of 25 years mining experience and had been employed at this mine for approximately one year.

Fred Stinson, Inspector-at-Large, for the West Virginia Office of Miners' Health, Safety, and Training, Welch office, learned of the accident on Sunday morning, March 23, 2003, at approximately 9:25 a.m. A phone message from the McDowell County Emergency Services indicating that an accident had occurred was left on Mr. Stinson's home answering service. Mr. Stinson then traveled to the mine where he spoke with Mine Foreman, Jeff Shrewsbury, who informed him that Mr. Williams' injuries were not believed to be life threatening. The Mine Safety and Health Administration (MSHA) was notified of the accident on Monday morning, March 24, 2003. MSHA and the OMHST then began a joint investigation.

Mr. Shrewsbury stated during a second interview on May 29, 2003, that Mr. Williams had been transferred from Charleston Area Medical Center to the Western Pennsylvania Burn Center by the afternoon on March 23, 2003. Mr. Shrewsbury also stated that he realized Mr. Williams' injuries were more serious at this point.

The last regularly scheduled inspection at this mine by the OMHST was concluded on March 5, 2003.

The Energy Plus, Inc., No. 50 Mine, was originally permitted to commence operation on September 21, 2001, and currently employs 24 people on two shifts. One underground unit mines coal from the Pocahontas No. 11 Seam with an average height of approximately 36 inches. The mine is located near Kimball, McDowell County, West Virginia. Approximately 250 raw tons are produced daily and transported to the surface by conveyor belt. Employees and supplies are transported by battery powered vehicles.

DESCRIPTION

The second shift crew, under the direction of Ronald D. Williams, Section Foreman, entered the mine on Saturday, March 22, 2003, at approximately 3:00 p.m. Battery powered, rubber tired personnel carriers were used for transportation. Coal production began at approximately 4:00 p.m. Approximately 180 linear feet/360 tons were mined until production stopped at approximately 11:00 p.m.

One 480-volt AC, 3-phase, resistance grounded, 225-amp receptacle on the section power center was being alternately used to power the coal feeder and scoop battery charger during the shift. Most of the crewmembers had been scheduled to stay over on the midnight shift (Sunday morning, March 23, 2003) to perform routine section work, equipment maintenance, and shoot a boom-hole. Explosives and detonators to shoot a boom-hole had been transported underground by Jeff Shrewsbury, Mine Foreman, during the day-shift on Saturday, March 22, 2003.

Jimmie Dillon, Shuttle Car Operator, transported two men to the surface at the end of the scheduled evening shift. Mr. Dillon received a call from Mr. Williams requesting that he bring a spool of cable while outside to the section on his return. Mr. Dillon started back underground around 1:00 a.m. and reported to Mr. Williams at the location where the boom-hole was to be shot. The boom-hole was located in the crosscut turned to the right in No. 6 Entry approximately two crosscuts inby the power center location.

Mr. Dillon was instructed by Mr. Williams to help tamp the shot when he arrived. Mr. Dillon understood that Mr. Williams was to be the person who would detonate the shot. Mr. Dillon assisted for some time before going to the No. 8 Entry to do cleaning and rock dusting. Scoop Operator, Doug Dawson, also assisted in the loading of the shot for approximately 30 minutes.

Prior to detonating the boom-hole shot, Mr. Williams advised all members of the crew his intentions. All crewmembers identified Mr. Williams as the person calling out the pre-shot warning by yelling "Fire" three times before the detonation.

Continuous Mining Machine Operator, Clyde Vaught, and Electrician, Danny Austin, were located in the No. 5 Entry face near the continuous miner at the time of the detonation around 4:30 a.m. Mr. Vaught then heard Mr. Williams call out for help within two to four minutes after the detonation. Mr. Vaught found Mr. Williams in the No.5 Entry, in the intersection, approximately 20 feet inby the power center near survey Spad No. 1585. Mr. Vaught found Mr. Williams sitting on the mine floor with severe burns to his hands and face.

Mr. Williams told Clyde Vaught to de-energize the power center. Mr. Vaught proceeded to pull the high voltage disconnects on the back of the power center, and then he pushed the 225-amp breaker operating handle for the receptacle where the fire occurred from the "engaged" closed position to the down or disengaged "re-set" position. Mr. Vaught stated that Mr. Williams then asked him to remove the shooting cable from the site without making it known to others.

Other crewmembers arrived within minutes. William Lusk, Jimmie Dillon, and Doug Dawson transported Mr. Williams to the surface. Danny Austin, Jerry Farmer and Clyde Vaught remained underground on the working section.

McDowell County Emergency Ambulance Authority Unit 815 departed the mine with Mr. Williams at 5:22 a.m. Mr. Williams was then taken by Health Net to CAMC in Charleston, West Virginia, and subsequently air-lifted to the Western Pennsylvania Hospital, Burn Center in Pittsburgh, Pennsylvania.

FINDINGS OF FACT

1. The source of the fire that caused Ronald Williams' injuries was a 480-volt AC 225-amp receptacle located on the 001 Section power center. The fire was initiated by contact with the receptacle on the exterior side of the power center. The fire did not originate from within the power center.
2. The 480-volt AC 225-amp receptacle involved in this accident and its 225-amp circuit breaker were retained by the OMHST and MSHA. The circuit breaker was examined and tested at the Cutler/Hammer Technical Support Center in Pittsburgh, Pennsylvania, on May 16, 2003. Cutler/Hammer now owns the Westinghouse electrical distribution and control operations. Westinghouse was the original manufacturer.
3. MSHA Technical Support personnel and OMHST electrical inspectors determined that the receptacle and breaker did not malfunction at the time of this accident.
4. Continuous Miner Operator, Clyde Vaught, stated that he was the first person to arrive at the site after the accident occurred. Mr. Vaught stated that the receptacle's 225-amp circuit breaker was in the engaged position, and he personally disengaged and reset it. Mr. Vaught also stated that there was no cathead plugged into the receptacle where the fire originated.
5. All persons interviewed stated they saw no cathead, cable, wire or any other object, metal or otherwise, in the vicinity of the power center which had indications of burn damage.
6. According to electrical inspectors from MSHA, OMHST and examiners from MSHA's Technical Support, the monitoring system for the circuit breaker and receptacle had been overridden. Inspections of the section power center along with the testing and inspection of the circuit breaker and receptacle revealed no evidence of malfunction. The fire and damage to the receptacle originated from an external contact or source. All persons interviewed during this investigation denied having knowledge of how, when, or who took the action to bridge or bypass the monitoring system.
7. Ronald Williams was said to have called out for assistance approximately two to four minutes after the detonation of explosives in a crosscut connecting No. 6 and No. 7 Entries.

8. Explosives had been loaded into holes drilled in the mine roof at this location and detonated to create a boom-hole cavity in the roof for a future belt drive installation. At least 75 holes (shots) containing two sticks of explosives per hole were detonated. A plan to detonate more than ten (10) shots at a time had not been approved by the OMHST.
9. Clyde Vaught stated that he and Electrician, Danny Austin, were servicing the continuous mining machine in the No. 5 Entry face at the time the shot was detonated. Their location would have been inby the shot location.
10. Shuttle Car Operator, Jimmie Dillon; Scoop Operator, Doug Dawson; along with Roof Bolt Machine Operators, Jerry Farmer and William Lusk, stated that they were located in the No. 8 Entry outby the shot at the time of the detonation.
11. Clyde Vaught stated that he was the first person to arrive at the accident site. He stated that after de-energizing the power center and resetting the circuit breaker at the receptacle where the fire occurred, he was asked by Ronald Williams to roll up and secure a shooting cable which extended from a point approximately 280 feet inby the power center to the boom hole shot site. The boom hole was located in the crosscut turned to the right in the No.6 Entry, one crosscut inby the power center area. According to Mr. Vaught, Mr. Williams asked him to remove the shooting cable and not reveal his actions afterward.
12. According to Clyde Vaught, the end of the shooting cable was located within a few feet of where he found Ronald Williams. The cable had insulation removed exposing bare leads on its end. Jerry Farmer, William Lusk, Jimmie Dillon, Doug Dawson, Danny Austin denied seeing the shooting cable at this location when they came to assist. Mr. Vaught also stated that he did not see evidence of heat damage at any point on the shooting cable.
13. Clyde Vaught stated that he found a battery powered detonating device on a vehicle normally operated by Ronald Williams after the accident. According to Mr. Vaught, this vehicle was located less than one crosscut inby the power center.
14. The material shot down at the boom hole location was removed and the area re-bolted after the accident during the day-shift on March 23, 2003. This area had been second mined (pillared) by the time the OMHST learned of the relevance of the boom-hole existence on May 29, 2003, and obviously could not be examined. Clyde Vaught, Jerry Farmer, Jimmie Dillon, Doug Dawson, and Jeff Shrewsbury described the boom-hole as being approximately 40 feet long by 14 feet in width.
15. A battery powered detonating device represented by the mine operator as the device Mr. Williams was to have used to detonate the boom hole shot was acquired by OMHST and MSHA investigators on May 30, 2003. An examination of the device by the MSHA Approval and Certification Center revealed that it was not approved for underground use.

16. Mine Foreman, Jeff Shrewsbury, stated that the battery powered detonating device battery cells were replaced around May 1, 2003.
17. Jeff Shrewsbury stated that he personally transported explosives and detonators to a location near the working section during the day-shift on Saturday, March 22, 2003. Mr. Shrewsbury stated that he transported two boxes containing explosives and described one box as almost full and the second box nearly empty. He acknowledged during interviews on May 29, 2003, that both boxes contained at least 150 sticks of explosives.
18. Jeff Shrewsbury and all other persons interviewed stated that no unused explosives were found after the accident. It is apparent that at least 75 holes containing two sticks per hole were detonated.
19. Ronald Williams was found a short distance into the intersection to the right approximately 20 feet in by the power center and receptacle where the fire occurred by Clyde Vaught and others who came to assist.
20. William Lusk, Jimmie Dillon, and Doug Dawson transported Ronald Williams to the surface. They estimated that the trip took at least 45 minutes. Clyde Vaught, Jerry Farmer, and Danny Austin remained underground on the working section. Mr. Vaught stated that he removed the shooting cable and placed it on a vehicle normally used by Mr. Williams while Mr. Farmer examined the working faces. Mr. Vaught and Mr. Farmer stated that Mr. Austin remained in the vicinity of the power center until they completed their job activities. The three men then traveled to the surface, arriving a few minutes after Mr. Williams was transported from the mine-site by ambulance.
21. Clyde Vaught, Danny Austin, Jimmie Dillon, William Lusk, and Jerry Farmer, along with Mine Foreman, Jeff Shrewsbury; day-shift Electrician, Jackie Harman; and Bluestone Coal Company Superintendent for Underground Mines, Tom Lusk, were interviewed initially on April 1, 2003. None of these individuals mentioned the loading and detonation of the boom-hole shot when asked by investigators to describe the events and type of work performed prior to the accident on Sunday morning March 23, 2003, at approximately 4:30 a.m. The individuals also stated that they had no idea how the accident resulting in Mr. Williams' injuries may have occurred.
22. Clyde Vaught, Jerry Farmer, Danny Austin, Jackie Harman, and Jeff Shrewsbury were interviewed again on May 29, 2003. Information regarding the boom-hole shot was also not offered by these individuals until specific direct questions pertaining to the shooting of the boom hole were asked by OMHST/MSHA investigators. MSHA Investigator, Roger Richmond, had spoken with Ronald Williams' surviving spouse following the April 1, 2003, interviews. Mrs. Theresa Williams had advised Mr. Richmond that her husband had expressed some concern regarding a boom-hole to be shot.
23. During the May 29, 2003, interviews, Clyde Vaught and Jerry Farmer denied having seen a shooting cable at any time prior to and after Mr. Williams was injured.

24. On May 30, 2003, Clyde Vaught made it known through a conversation with Mine Foreman, Jeff Shrewsbury, that he had previously provided false information to investigators and now wished to provide truthful and accurate information. Mr. Vaught then told investigators that he had indeed seen shooting cable with a few feet of where he found Ronald Williams after the accident and that he had removed it from the scene at Mr. Williams' request.

CONCLUSION

Ronald D. Williams, Section Foreman, received fatal injuries from electrical arcing that occurred when an external source came in contact with 2-phases of a 3-phase energized resistance grounded 480-volt AC 225-amp receptacle of the section power center. Mr. Williams died on April 20, 2003, from the injuries he received from this accident.

ENFORCEMENT ACTION

Seven violations were issued following the investigation of this accident. The following two violations are contributing factors:

Title 36 Series 12 Section 4.74

During an investigation of an electrical accident at the Energy Plus, Inc., No. 50 Mine, which resulted in the death of Ronald Williams, it has been revealed that the fail safe ground monitoring device for the 480-volt 3-phase coal feeder circuit on the Mains Section was bypassed or bridged to allow the circuit breaker to be energized with the cable coupler unplugged. Photos taken of the circuit breaker after the accident showed the bottom part of the breaker handle to be burnt or blackened and the top half of the handle to be unaffected. This condition indicates, along with testimony taken during interviews, that the breaker handle was in the up or on position when the accident occurred. The ground monitoring device was removed and taken to MSHA's Technical Support Laboratory for testing. After the accident, the test results proved that the monitoring device was working as designed. Testimony and physical evidence also revealed that a male cable coupler or (cathead) was not involved in the incident.

Chapter 22A Article 2 Section 33(a)

On March 23, 2003, a shot was fired (detonated) consisting of the shooting of a boom hole whereas a permissible shot firing unit (battery) was not used. The shot was fired from an opened faced 480-volt AC receptacle at the section power center located on the 001 working section.

RECOMMENDATIONS

Management shall assure that all persons performing certified work be properly trained and certified in such field of work.

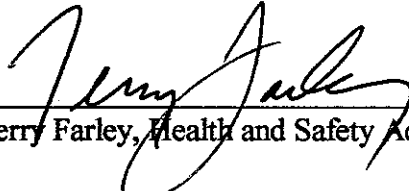
ADDITIONAL STATEMENT

This investigation will continue if additional information is obtained and an addendum will be provided.


ACKNOWLEDGMENT

The West Virginia Office of Miners' Health, Safety and Training acknowledges the cooperation of Energy Plus, Inc., the United Mine Workers of America and the Mine Safety and Health Administration during this investigation.

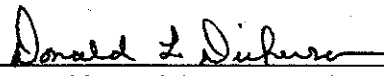
Respectfully submitted:



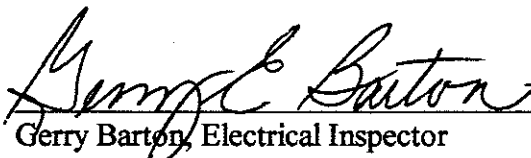
Terry Farley, Health and Safety Administrator 7-24-03
Date



Fred B. Stinson, Inspector-at-Large 7/23/03
Date



Donald L. Dickerson, Assistant Inspector-at-Large 7/23/03
Date



Gerry Barton, Electrical Inspector 7/23-03
Date

APPENDIX

- Mine Data Sheet
- Victim Data Sheet
- Supplemental Information
- List of Persons Providing Information/or Present During the Investigation

MINE INFORMATION

COMPANY NAME Energy Plus, Inc.

MINE NAME No. 50

WV PERMIT U-4016-93D MSHA PERMIT NO. 46-08776

ADDRESS HC 52 Box 4000, Keystone, WV 24852

COUNTY McDowell PHONE NUMBER 304-585-7680

DATE PERMIT ISSUED September 21, 2003

WORKING STATUS Active

LOCATION Carswell Hollow near Kimball, WV

UNION X NON-UNION _____

DAILY PRODUCTION 363 Tons

ANNUAL PRODUCTION TO DATE 18,093 Tons

TOTAL EMPLOYEES 24

NUMBER OF SHIFTS Two

NAME OF COAL BED Pocahontas No. 11

SEAM THICKNESS 36 Inches

ACCIDENT INCIDENT RATE 16.62 LOST TIME ACCIDENTS 1

TYPE OF HAULAGE Conveyor Belt

WVOMHST INSPECTOR Steve Womack 46

DATE OF LAST INSPECTION March 5, 2003

NOTIFIED BY McDowell County 911 Service

TIME OF NOTIFICATION 9:25 A.M. March 23, 2003

CMSP – ANNIVERSARY DATE September 1, 2003

CMSP – CONTACT PERSON Kenneth C. Lambert

VICTIM INFORMATION

NAME OF VICTIM Ronald D. Williams
ADDRESS 50 Bland Street, Welch, WV 24802
AGE 51 SOCIAL SECURITY NUMBER [REDACTED]-6681
TOTAL MINING EXPERIENCE 25 Years
EXPERIENCE AT THIS MINE 1 Year
OCCUPATION AT TIME OF ACCIDENT Section Foreman
REGULAR OCCUPATION Section Foreman
COAL MINER'S CERTIFICATION NUMBER N-2672
OTHER CERTIFICATIONS 28262 Mine Foreman
SPOUSE'S NAME Theresa Williams
DEPENDENTS 0
DATE OF ACCIDENT 23rd DAY OF March, 2003.
AT 5:00 O'CLOCK A.M.

CAUSE OF ACCIDENT:

Ronald D. Williams, Section Foreman, received fatal injuries from electrical arcing that occurred when an external source came in contact with 2-phases of an energized 480-volt AC 3-phase resistance grounded 225-amp receptacle of the section power center. Mr. Williams died on April 20, 2003, from the injuries he received from this accident.

DATE OF DEATH: 10th DAY OF April, 2003.

SUPPLEMENTAL INFORMATION

Mr. Ronald D. Williams received annual refresher training on February 1, 2003.

INVESTIGATION

The following persons were present on April 1, 2003, during investigation interviews.

ENERGY PLUS, INC.

Kenny Lambert	Superintendent
Jeff Shrewsbury*	Mine Foreman
Clyde Vaught*	Continuous Miner Operator
Danny Austin*	Second Shift Electrician
Jerry Farmer*	Roof Bolter Operator
William Lusk*	Roof Bolter Operator
Jimmie Dillon*	Scoop Operator
Jackie Harman*	Day Shift Electrician

*Denotes Persons Interviewed

BLUESTONE COAL CORPORATION

Tom Lusk*	Mine Manager
-----------	--------------

*Denotes Persons Interviewed

MINE SAFETY AND HEALTH ADMINISTRATION

Roger Richmond	Investigator
William Sperry	Electrical Inspector
Preston White	Mine Safety and Health Specialist

UNITED MINE WORKERS OF AMERICA

Roger Yates	International Representative
-------------	------------------------------

WEST VIRGINIA OFFICE OF MINERS HEALTH, SAFETY, AND TRAINING

C.A. Phillips	Deputy Director
Terry Farley	Health and Safety Administrator
Fred Stinson	Inspector-at-Large
Donald L. Dickerson	Assistant Inspector-at-Large
Gerry Barton	Electrical Inspector

The following persons were present on May 29, 2003, during investigation interviews.

ENERGY PLUS, INC.

Kenny Lambert	Superintendent
Jeff Shrewsbury*	Mine Foreman
Clyde Vaught*	Continuous Miner Operator
Danny Austin*	Second Shift Electrician
Jerry Farmer*	Roof Bolter Operator
William Lusk	Roof Bolter Operator
Jimmie Dillon	Scoop Operator
Jackie Harman*	Day Shift Electrician
Christopher B. Power	Attorney
Donna Kelly	Attorney

BLUESTONE COAL CORPORATION

Tom Lusk	Mine Manager
----------	--------------

MINE SAFETY AND HEALTH ADMINISTRATION

Jim Beha	Investigator
Roger Richmond	Investigator
William Sperry	Electrical Inspector
Larry Cook	Electrical Supervisor

UNITED MINE WORKERS OF AMERICA

Gary Trout	International Representative
------------	------------------------------

SOUTHERN SAFETY

Donnie Coleman	Trainer
----------------	---------

WEST VIRGINIA OFFICE OF MINERS HEALTH, SAFETY AND TRAINING

C. A. Phillips	Deputy Director
Terry Farley	Health and Safety Administrator
Donald L. Dickerson	Assistant Inspector-at-Large
Gerry Barton	Electrical Inspector
John Scott	Electrical Inspector

The following persons were present on May 30, 2003, during investigation interviews.

ENERGY PLUS, INC.

Kenny Lambert	Superintendent
Jeff Shrewsbury*	Mine Foreman
Clyde Vaught*	Continuous Miner Operator
Danny Austin	Second Shift Electrician
Jerry Farmer	Roof Bolter Operator
William Lusk*	Roof Bolter Operator
Jimmie Dillon*	Scoop Operator
Doug Dawson*	Shuttle Car Operator
Donna Kelly	Attorney

BLUESTONE COAL CORPORATION

Tom Lusk	Mine Manager
----------	--------------

MINE SAFETY AND HEALTH ADMINISTRATION

Roger Richmond	Investigator
William Sperry	Electrical Inspector
Larry Cook	Electrical Inspector

UNITED MINE WORKERS OF AMERICA

Gary Trout	International Representative
------------	------------------------------

SOUTHERN SAFETY

Donnie Coleman	Trainer
----------------	---------

WEST VIRGINIA OFFICE OF MINERS HEALTH SAFETY AND TRAINING

C. A. Phillip	Deputy Director
Terry Farley	Health and Safety Administrator
Donald L. Dickerson	Assistant Inspector-at-Large
Gerry Barton	Electrical Inspector
John Scott	Electrical Inspector